

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Skype Communications S.A.R.L.)	RM – 11361
)	
Petition to Confirm A Consumer's Right to)	
Use Internet Communications Software and)	
Attach Devices to Wireless Networks)	

COMMENTS OF VERIZON WIRELESS

John T. Scott, III
Vice President and Deputy
General Counsel – Regulatory Law

William D. Wallace
Counsel

Verizon Wireless
1300 I Street, N.W.
Suite 400 West
Washington, D.C. 20005
(202) 589-3740

Date: April 30, 2007

SUMMARY

Skype's Petition essentially requests that the Commission restructure the wireless sector through a government-imposed open access regime, but it fails to make a case for the sweeping and intrusive regulation it wants. Skype makes claims with no factual support concerning the wireless sector and wireless networks, and ignores the vigorous competition and benefits that the existing structure has brought consumers. It wants a regime that would harm consumers and undermine federal wireless policies. And it frivolously stakes its petition on a 40-year-old case that is totally inapposite to the wireless industry – as the Commission itself has held. Its petition should be rejected for three independent reasons:

1. Skype fails to demonstrate that there is any market failure or problem warranting government intervention. The Commission's market-driven approach has enabled the wireless sector to provide immense benefits to the American economy, and consumers enjoy the proliferating choices among service providers, devices and applications. In considering new wireless regulation, the Commission must follow as its guiding principle Congress' and its own deregulatory approach for wireless – to impose rules **only** where there is a market failure or other clear-cut need for intervention, and then to regulate as narrowly as possible. The burden is on Skype to demonstrate this need, and Part II of these comments show that it fails to come close. The Commission has repeatedly found that the market for wireless devices and applications is robustly competitive, with hundreds of devices and applications flooding consumers with thousands of choices.

Skype's sparse examples of what it claims to be anticompetitive conduct are rife with errors and unsupported claims. In fact, as these comments and supporting documents show, the few limits that Verizon Wireless places on devices and applications are not only legitimate

exercises of network management and widely used in other competitive industries, but are critical to maintaining the quality of its network and serving its customers. Skype fails to grapple with the fact that the wireless sector evolved on an economic model where wireless devices, networks and applications are highly and productively integrated. This is not anticompetitive – it is profoundly competitive. There is nothing in Skype’s petition that would support a rulemaking to consider intervening to change that successful model.

2. Skype’s regime would be harmful. It would impede carriers’ ability to provide customers with reliable service, create risks to public safety and law enforcement, and discourage continued capital investment that is essential for broadband deployment. While Skype’s failure to make the required compelling case for regulation should be fatal to its petition, the Commission also needs to understand the harms that Skype’s proposed regime would threaten. The open-access Nirvana Skype promises would more likely be a nightmare. The decades-old regime under the Communications Act where carriers are responsible for the devices on their network – a regime that enabled the Commission to promote social goals such as enhanced 911 and hearing aid-compatible handsets – would be undermined. Part III of Verizon Wireless’ comments document these and other problems. For example:

- ***Lost Benefits of Bundling.*** By coordinating devices and applications with the network, wireless carriers have been able to offer a broad range of reliable and efficient services to subscribers, generally free from security or privacy concerns. When consumers choose devices and applications separately, there is no guarantee that the handsets or applications will operate in the most reliable or efficient manner with any given network.
- ***Interference with User Access.*** Skype’s petition ignores the fact that wireless networks depend on subscriber use of a shared spectrum resource that can be affected by the actions of individual users. While some unregulated devices can cause traceable interference, even “non-harmful” applications and devices can have a deleterious affect on thousands of users. Under Skype’s regime, users with particular devices could deprive other users of access.

- *Loss of Incentives for Innovation by Wireless Carriers.* If Skype's regime were imposed, the business of wireless network operators would shift dramatically, from the current model in which they sell wireless service plans and equipment associated with those plans, to a model in which they primarily offer subscribers access to a wireless network. In this model, wireless network operators would have a decreased incentive to develop new products or services, because they would primarily be in the business of providing airtime access for products chosen by the consumer, deterring investment away from network upgrades.
- *Impairment of Network Reliability and Customer Service.* Wireless subscribers would notice a decline in network reliability and accessibility. Carriers would lose the ability to manage their networks to maximize high-quality experiences for users. Subscribers would face a first-come, first-served environment, much like the party lines on the PSTN decades ago. Depending on the bandwidth available on the network, networks may find it difficult to attract subscribers because of such limitations, or may have to use higher access prices to limit usage. Customers would no longer enjoy one-stop customer service on their devices from the carrier. A customer may need to make separate calls to the equipment maker, the software provider, and the network operator, to address a service issue. Diffusing responsibility would frustrate consumers.
- *Harms to FCC Programs Implemented through Wireless Carriers and Risks to Law Enforcement.* The Commission currently implements many technical and social programs through the relationship between wireless carriers and the devices that operate on their networks. These include the wireless E-911 program, hearing aid compatibility, and Congress' plan for a nationwide wireless emergency alert system. If the Commission "unbundles" that relationship, as it would have to do to fulfill Skype's requests, these programs would be impaired. In addition, replacing a carrier-managed networks with mandated open access would allow encrypted applications that could impede law enforcement's ability to engage in lawful surveillance.

3. Skype's petition is based on a 1968 Commission order that has no bearing on the mobile wireless sector of 2007. In fact, the Commission has already determined that the order does not apply to wireless. Because Skype's petition is constructed entirely on the inapposite 1968 *Carterfone* decision and irrelevant rules, it collapses of its own weight. Skype asks for a declaratory ruling that *Carterfone* applies to wireless services, and then a rulemaking to "enforce" *Carterfone* by requiring carriers to accept virtually all devices and applications on their networks. But *Carterfone* was a regulatory response to the vertically-integrated wireline telephone monopoly that existed in 1968. Its solution was to force competition in the CPE

market by compelling AT&T to accept non-harmful devices, and to adopt an entire set of rules (47 CFR Part 68) setting uniform standards for those devices.

Skype's request that *Carterfone* be enforced fails to acknowledge that the Commission has rejected *Carterfone* as a governing rule for the wireless industry. Moreover, as Part IV of these comments shows, neither the market conditions that *Carterfone* responded to, nor the solutions it adopted, bear any resemblance to today's wireless market. "Enforcing" *Carterfone* against the wireless sector would be like taking 1900's era Interstate Commerce Commission rules for railroads and applying them to today's computer industry. There is no vertically-integrated monopoly – there is a vigorous competitive wireless sector. There is no market failure in either CPE or applications – there are literally hundreds of devices and programs available to consumers, with new ones being created every week. And, the Commission has previously rejected the "single standard" Part 68 approach Skype demands.

The question of whether to impose Skype's regime on the wireless sector should be answered by looking at today's wireless market, not by looking backward at the 1960s landline telephone market. The real risks from the regulatory regime Skype seeks stand in contrast to the illusory benefits from that regime. When the wireless industry was far less competitive than it is today, the Commission wisely rejected just this type of interference in the market. The case for not intervening is even stronger today. Skype's petition should be rejected.

TABLE OF CONTENTS

SUMMARY	i
I. SKYPE HAS NOT INVESTED IN WIRELESS NETWORKS, YET DEMANDS THAT THE GOVERNMENT RESTRUCTURE THOSE NETWORKS	1
II. THERE IS NO FACTUAL BASIS FOR NEW REGULATION OF WIRELESS DEVICES AND APPLICATIONS.....	4
A. Congress and the Commission Have Set a High Hurdle for Wireless Regulation.4
B. Wireless Services are Vigorously Competitive	6
C. The Wireless Device Market Is Likewise Intensely Competitive	11
D. Skype’s Claims of Competitive Harm Are Incorrect.....	15
E. Skype’s Claim That Innovation Is Being Suppressed Is Also Incorrect23
111. THE REGIME SOUGHT BY SKYPE WOULD BE HARMFUL AND WOULD NOT BENEFIT CONSUMERS OF WIRELESS SERVICES	29
A. Significant Technical Differences Exist Between Wireline and Wireless Networks	29
B. Skype’s Regime Would Undermine the Communications Act’s Model for Wireless Services	31
C. Skype’s Regime Would Prevent Wireless Carriers from Managing Their Network to Minimize Interference and Optimize Customer Experience.....	.33
D. Skype’s Regime Would Frustrate The Commission’s Ability to Achieve Emergency Alert and Other Public Interest Goals	35
E. Grant of Skype’s Petition Would Impede Law Enforcement’s Ability to Engage in Lawful Surveillance	37
F. Skype’s Regime Would Impair Consumers’ Access to Wireless E911 and the Quality of Wireless E911.....	39

G.	A Common Standard for Wireless Would Diminish the Reliability And Accessibility of Wireless Networks and Disserve Consumers	44
IV.	CARTERPHONE PROVIDES NO BASIS FOR REGULATING THE INDUSTRY	48
A.	<i>Carterfone</i> Was a Response to a Monopoly That Bears No Resemblance To Today’s Robustly Competitive CMRS Market	48
B.	The Commission Has Already Rejected <i>Carterfone</i> ’s Concept of a Single Access Standard for Wireless	53
C.	The Commission Rejected <i>Carterfone</i> -Like Requirements in Its 1992 Cellular Bundling Order	56
D.	The Commission Also Rejected Applying <i>Carterfone</i> to Cellular Service.....	58
E.	<i>Carterfone</i> Cannot Apply To Wireless Broadband Internet Access Services.....	60
F.	The Use of <i>Carterfone</i> -Like Rules for Cable Navigation Devices Does not Support Skype’s Request	63
G.	Skype’s Petition for Declaratory Ruling Is Defective	67
V.	CONCLUSION	71

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Skype Communications S.A.R.L.)	RM – 11361
)	
Petition to Confirm A Consumer's Right to)	
Use Internet Communications Software and)	
Attach Devices to Wireless Networks)	

COMMENTS OF VERIZON WIRELESS

For the reasons set forth in the following comments, Verizon Wireless urges the Commission to reject Skype's above-referenced petition.

I. SKYPE HAS NOT INVESTED IN WIRELESS NETWORKS, YET DEMANDS THAT THE GOVERNMENT RESTRUCTURE THOSE NETWORKS.

Skype, a wholly-owned subsidiary of internet auctioneer eBay, is a computer-to-computer Voice over Internet Protocol (VoIP) communications service. Skype, unlike U.S. wireless carriers such as Verizon Wireless, AT&T Mobility, T-Mobile, Alltel, and others, has not purchased spectrum at auction; holds no FCC-granted spectrum licenses; has not invested in or built network facilities; does not manage a communications network; and does not maintain a customer service organization.

Skype's product works as follows: After downloading the necessary Skype software, and obtaining a broadband connection from an unaffiliated carrier, a Skype user can call, or be called by, other Skype users over their computers, bypassing the traditional telecommunications network, and, for an additional fee, can make and receive calls from the local communications

network. Skype offers free or at least cheap local and international calling, the possibility of anonymity for users, and several other features, such as the opportunity to establish text “chat room” like connections. Skype has built a community of users, and the company was purchased by eBay in October 2005. Skype’s principal assets are its software and proprietary techniques for using the Internet to deliver and distribute calls. Skype is generally not regulated at a federal or state level in the United States, and has almost no regulatory obligations, although the Commission has recently imposed requirements on interconnected VoIP services to comply with certain very basic obligations to protect consumers and assist law enforcement.

Like any other software developer, Skype has the opportunity to work with wireless handset manufacturers and commercial wireless operators to develop a Skype product that can be used on a variety of wireless handsets and systems in the United States (*e.g.*, using BREW or JAVA). It has already entered into some such arrangements with wireless operators in Europe, which suggests that some wireless operators have found a valid commercial proposition to partner with Skype.

Rather than investing in spectrum, infrastructure, distribution, or customer care, or partnering with carriers to establish a mobile Skype functionality in the U.S. market, Skype has asked the Commission to allow it UNE-P type access to U.S. wireless carriers’ networks. It wants the Commission to “declare” that U.S. wireless networks are “open” so as to allow any device or application (read: Skype software) to operate on any wireless network, whether or not the device or application has been specifically developed for use on or coordinated technically with the network facilities.

Skype claims that consumers will somehow benefit from its proposals, even though it has no experience building, operating and managing a wireless network, and no experience

dealing with consumer expectations for wireless products and services. Moreover, while Skype has been successful in its own niche service, it has shown no consumer demand for the results of the wireless regulatory regime it espouses. In fact the current structure built on integrated devices and networks, with very limited regulatory oversight, has proven successful, as thousands of products and applications are developed and win consumer acceptance through an unquestionably competitive marketplace.

Verizon Wireless and its predecessor companies have spent the last 25 years building the most reliable wireless network in the United States. Over the last several years, it has spent on average \$5 billion a year on network upgrades and innovations. Throughout, although lightly regulated, it has implemented and contributed to various federal and state public programs for the benefit of its own subscribers and the public. Verizon Wireless has over 60 million subscribers and offers a customer service organization that can deal with all of them with respect to service, handsets, and the software applications that appear on their devices. Verizon Wireless has over 66,000 employees, and possesses a great deal of knowledge about how wireless networks operate, what is required to maintain them and to provide reliable services, and how to develop wireless devices and applications for consumers.

Using the facts regarding the economic, competitive and technical workings of the wireless industry, the Commission's legal framework for regulating wireless, and its 25 years of experience in the wireless industry, Verizon Wireless explains in these comments why the Commission should reject Skype's requests. Skype's proposals for a common wireless network regime in the U.S. are flawed economically, technically and legally, and ignore the very important fact that, like every other application developer, Skype has access to the U.S. wireless marketplace.

In support of the economic, competitive and technical facts provided in these Comments, Verizon Wireless has commissioned three statements. In Exhibit A, economist Thomas Hazlett provides an economic analysis of the implications of “Wireless *Carterfone*” (referred to as “Hazlett Statement”). Exhibit B is a white paper by wireless industry analyst Mark Lowenstein discussing how Skype’s proposals would affect consumers and carriers in the current wireless marketplace (“Lowenstein Statement”). In Exhibit C, Brian Higgins of Verizon Wireless explains technical aspects of the development of wireless products and services, the necessary coordination of wireless handsets and devices with the network, and the harms Skype’s regime would cause (“Higgins Statement”).

11. THERE IS NO FACTUAL BASIS FOR NEW REGULATION OF WIRELESS DEVICES AND APPLICATIONS.

Skype asks for unprecedented, sweeping economic regulation of the wireless industry. Under longstanding Congressional and Commission policy for economic regulation of the mobile wireless industry, Skype has a high burden to demonstrate that such regulation is clearly warranted to address a specific market failure or other problem, and it has not met that burden.

A. Congress and the Commission Have Set a High Hurdle for Wireless Regulation.

In considering Skype’s petition for rulemaking, the Commission must start with the overarching deregulatory approach that both it and Congress have followed for more than a decade – an approach that the Commission has found has proven hugely successful for the American economy and for consumers. That approach starts from Congress’ enactment of the Omnibus Budget Reconciliation Act of **1993** (OBRA), which amended the Communications Act. The Commission has declared that the “overarching congressional goal” in OBRA was

“promoting opportunities for economic forces – not regulation – to shape the development of the CMRS market.”¹ Congress amended the Act to implement its “general preference in favor of reliance on market forces rather than regulation,”² and to permit the mobile wireless market to develop subject only to the degree of regulation “for which the Commission and the states demonstrate a clear-cut need.”³ This means that any new mandate for mobile wireless services must have a clear factual record justifying it, such as evidence of market failure.

The Commission has recognized the critical importance of investment in wireless networks in driving benefits to consumers and the harm that regulation can have on investment:

The continued success of the mobile telecommunications industry is significantly linked to the ongoing flow of investment capital into the industry. It thus is essential that our policies promote robust investment in mobile services. In this Order, we try to promote this goal by ensuring that regulation is perceived by the investment community as a positive factor that creates incentives for investment in the development of valuable communications services – rather than as a burden standing in the way of entrepreneurial opportunities – and by establishing a stable, predictable regulatory environment that facilitates prudent business planning.⁴

Nothing would be more destructive to investment in wireless networks than the massive new regulatory regime that Skype proposes. By forcing carriers to allow any device and any application to use their network, their incentives to design those networks would be completely undermined. Carriers derive economic value from their networks – and thus can secure the

¹ *Implementation of Sections 3(n) and 332 of the Communications Act, Third Report and Order*, 9 FCC Rcd 7988, 8012 (1994).

² *Petition of New York State Public Service Commission*, 10 FCC Rcd 8187, 9190 (1995).

³ *Petition of the State of Hawaii*, 10 FCC Rcd 7872, 7874 (1995).

⁴ *Implementation of Sections 3(n) and 332 of the Communications Act, Second Report and Order*, 9 FCC Rcd 1411, 1421 (1993).

capital to build and improve those networks – from the ability to offer value to customers who subscribe. Under the “open access” model Skype proposes, carriers’ ability to recoup that investment would be undercut.

B. Wireless Services Are Vigorously Competitive.

At the heart of Skype’s petition is the claim that wireless service providers are engaged in marketing practices that harm consumers. *See Skype Petition*, at 13-25. In fact, there is no evidence that wireless service providers have harmed consumer welfare. To the contrary, as the Commission has found, vigorous competition in the wireless industry has brought consumers extraordinary benefits. With carriers engaged in massive pro-consumers investments in EV-DO, and now EV-DO Rev. A, and other broadband technologies and adding new devices and applications at a dizzying rate, there is no sign that this trend is abating.

In evaluating Skype’s claims, the Commission should not be taken in by misleading references to what “carriers” are doing. As described below, the wireless industry encompasses a large number and variety of wireless service providers, including four national carriers, numerous regional carriers, and a growing array of MVNOs targeting specific market segments. With regard to the policies and practices at issue in Skype’s petition – related to devices, applications, and terms of service – wireless service providers have followed and will continue to pursue divergent paths, based on their own business judgments, marketing priorities, and competitive strengths. Skype claims that “the issue today is not simply whether wireless carriers can control the market for basic wireless telephony, but whether they can control the adjacent markets for applications and services that use the carriers’ 3G platform [sic].” *Skype Petition*, at 22. But the issue is not what wireless service providers *collectively* can do, because

wireless service providers do not act collectively.⁵ If a carrier adopts a practice that harms consumers, consumers will simply choose another carrier.⁶ In the competitive and constantly evolving wireless marketplace, *consumers* make choices, based on what matters to *them*. Skype's implicit claim is that the Commission should override those choices. But that is profoundly contrary to Congress' and the Commission's deregulatory paradigm for wireless.

Skype conspicuously does not claim that there is any evidence that wireless service providers are coordinating their marketplace behavior, and the Commission has repeatedly concluded not only that there is no evidence of such coordination, but also that the structure of the wireless sector – including the presence of small regional competitors – makes any such coordination unlikely.⁷ If there are policies that are widely adopted by multiple carriers in competitive markets, then there should be a presumption that such practices are efficient – at least in the absence of strong evidence to the contrary.' *For this reason as well, regulation would threaten to "fix" what is simply not broken.*

⁵ As a federal court recently found in rejecting a claim that carriers' marketing practices were suppressing competition in the sale of handsets, "the issue is not whether a [particular wireless service provider] has impaired the distribution of a particularly kind of product with its own service but whether it has impaired competition . . . within the handset market." *Wireless Tel. Servs. Antitrust Litig.*, 385 F. Supp. 2d 403,429 (S.D.N.Y. 2005).

⁶ See *Applications of Nextel Communications, Inc. and Sprint Corporation for Consent To Transfer Control of Licenses and Authorizations*, 20 FCC Rcd 13967, ¶¶ 101, 116 (2005) ("*Sprint Nextel Order*") (noting that consumers consider wireless providers to be substitutes for one another).

⁷ *Id.*, ¶¶ 35, 85.

⁸ See Richard A. Posner, *Antitrust Law* 253 (2d ed. 2001). For that reason, Skype's claim that there are no "mavericks" in the wireless industry, Petition at 25, is a red herring. Wireless providers large and small have adopted a variety of business strategies in an effort to gain a competitive advantage. There are, in other words, many "mavericks" which have tested strategies that one of more of the national carriers may not have pursued. But if a business strategy is inefficient, no provider – maverick or not – would adopt it, because such a policy would not be in the carrier's unilateral business interest. See also Higgins Statement, at 24-25.

As the Commission has found, competitive choice has propelled expansion in output and reductions in price. Wireless subscribership has increased dramatically, with the number of wireless subscribers increasing to 213 million by the end of 2005, an increase of 50 percent in three years.⁹ And wireless usage has increased even more dramatically: *average* usage increased to 820 minutes of use (“MOUs”) in 2005, up 110 MOUs from a year earlier.” Usage increased to nearly 2 trillion minutes in 2006.”

The competitiveness of the wireless services market is underscored by the fact that the number of wireless subscribers and their use of wireless service continue to grow while prices continue to fall. In 2005, the number of mobile phone subscribers increased from 184.7 million to 213 million, with average minutes of use per subscriber per month rising to 740 minutes in the second half of 2005 from 584 minutes in 2004.¹² Even with more customers and usage, wireless revenue per minute fell 22 percent in 2005, from \$0.09 in 2004 to \$0.07 in 2005.¹³

Competition has also fueled extraordinary investment and rapid innovation. Carriers have invested more than \$200 billion in their networks; with \$25 billion invested in 2005

⁹ *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Eleventh Report*, 21 FCC Rcd 10947, ¶ 158 (2006) (“*Eleventh Competition Report*”).

¹⁰ *Id.*, ¶ 168

¹¹ CTIA, *CTIA – The Wireless Association’s Annualized Wireless Industry Survey Results, December 1985-December 2004*, at 7 (2005).

¹² *Eleventh Competition Report*, ¶ 5.

¹³ *Id.*, ¶ 154; *see also id.* ¶ 4 (noting that “[c]onsumers continue to pressure carriers to compete on price and other terms and conditions of service by freely switching providers in response to differences in the cost and quality of service”). Growth in the wireless industry has not occurred at the expense of customer satisfaction. The J.D. Power and Associates 2006 Wireless Call Quality Study found that the quality of mobile telephone service improved last year, with reported problems per 100 calls reaching the lowest level since the inaugural study in 2003. *J.D. Power and Associates Reports: The Number of Call Quality Problems Experienced With a Wireless Service Has Declined for a Second Consecutive Year*, Press Release, J.D. Power and Associates (Mar. 16, 2006).

alone.¹⁴ Verizon Wireless, Sprint Nextel, and AT&T – have implemented broadband service.¹⁵

A fourth carrier, T-Mobile, recently invested more than \$4 billion in spectrum for the same purpose. And, just as the competitive market is supposed to work, investment and innovation by one carrier leads to similar investment and innovation by others. For example, Verizon Wireless was the first to deploy its mobile broadband service (“BroadbandAccess”) in 2003, followed by Sprint’s broadband service in 2004, and by Cingular’s commercial broadband deployment the following year. A competitive market leads to competitive responses, all to the benefit of consumers generally and of subscribers to all carriers.

While Skype holds up Europe as a model for the United States to follow, the U.S. wireless market has in fact performed better than markets elsewhere. Wireless usage is much greater in the U.S. than internationally, and wireless rates in the U.S. are among the lowest in the world.¹⁶ “[T]he results of this international comparison can be interpreted as evidence that the U.S. mobile market is effectively competitive relative to mobile markets in Western Europe and also Japan.”¹⁷ Furthermore, as the Commission and others have found, the U.S. has leapfrogged Europe in making wireless broadband services available, despite getting a later start due to early 3G licensing in Europe, giving “the United States an edge over Europe in

¹⁴ CTIA, *CTIA – The Wireless Association’s Annualized Wireless Industry Survey Results, December 1985-December 2004* (2005); CTIA, *Wireless Quick Facts* (Sept. 2006), <http://www.ctia.org/media/industryinfo/index.cfm/AID/10323>; *Eleventh Competition Report* ¶ 124.

¹⁵ *Eleventh Competition Report*, ¶¶ 110, 111, 113.

¹⁶ *Id.*, ¶¶ 191-193, 195.

¹⁷ *Id.*, ¶ 195.

wireless data networks for the first time in years.”” Wireless broadband services are now more widely available in the U.S. than in Europe, and also offer higher speeds.”

Skype argues, based on average HHI figures for the wireless industry, that the industry is “highly concentrated.” *Skype Petition*, at 21. But the Commission has rejected that argument, noting that “although the mobile telephone market has become more concentrated as a result of . . . mergers, none of the remaining competitors has a dominant share of the market, and the market continues to behave and perform in a competitive manner.”²⁰ Today, there are four national wireless carriers in virtually every geographic area, plus additional regional or local carriers.²¹ As Chairman Martin noted, “[c]ompetition among mobile telephone carriers has lowered the price consumers pay for mobile telephone service, stimulating rapid subscriber growth and greater usage of mobile phones. Competition has also encouraged mobile telephone carriers to improve service quality and to begin deploying significantly faster broadband technologies on their networks.”²²

¹⁸ *Id.*, ¶ 202 (“Although early 3G licensing gave European operators a head start in the deployment of WCDMA networks, *Wall Street Journal* personal technology columnist Walt Mossberg argues that the superior next-generation technologies deployed by U.S. wireless carriers have given the United States an edge over Europe in wireless data networks for the first time in years.”) (citing Walter S. Mossberg, *Cingular Joins Rivals with Fast, Reliable Wireless Broadband*, *Wall St. J.* at A9 (Jan. 19, 2006)).

¹⁹ *Id.*

²⁰ *Id.*, ¶ 2.

²¹ See, e.g., P. Cusick, *et al.*, Bear Stearns, *4Q06 Big-4 and Wireless Industry Preview; Early Look at 2007* at 12-13 (Jan. 19, 2007) (estimating shares of regional and national carriers); M. Rollins, *et al.*, Citigroup, *Teleconomy 2007* at Table 5 (Jan. 5, 2007) (covered pops).

²² *Eleventh Competition Report*, Statement of Chairman Kevin J. Martin.

C. The Wireless Device Market Is Likewise Intensely Competitive.

No wireless service provider in the United States manufactures wireless devices and the market for those devices is likewise fiercely competitive.²³ Across the U.S., there are currently more than 800 wireless phones and devices available to consumers, from nearly three dozen manufacturers.²⁴ The four national wireless carriers currently offer a total of more than 100 phones,²⁵ 95 percent of which are unique to a single provider. A number of innovative new devices, by new manufacturers, such as Apple's iPhone²⁶ and HP's iPAQ Voice Messenger²⁷ are entering the market. Major handset manufacturers like Motorola are facing an extremely competitive environment and face strong pressure keep prices low while continuing to innovate.²⁸ Each year, wireless devices have grown more sophisticated, delivering multitudes of features. Text messaging has taken off enormously in the past few years.²⁹ Phones are now equipped with cameras as well as many of the features of desktop computers. Wireless handsets have become person-specific devices, and wireless carriers must compete vigorously

²³ Lowenstein Statement, at 1.

²⁴ See Phone Scoop, <http://www.phonescoop.com/Phones/>.

²⁵ See D. Barden, *et al.*, Bank of America, *4Q06 Trends in Wireless Services & Handset Pricing* at 22-26 (Dec. 2006). Variations in color were not counted as unique devices.

²⁶ S. Flannery, *et al.*, Morgan Stanley, *Will AT&T and Rogers Catch the iPhone Fever?* at 3 (Feb. 6, 2007) (Morgan Stanley estimates that the iPhone will account for 4.7 percent of the North American handset shipments in 2008: "This is significant for such a high priced phone but it is certainly achievable if the product is widely accepted.").

²⁷ Hewlett Packard Press Release, "HP Unveils Smartphone with Powerful Wireless Email Capabilities for Mobile Professionals" (Feb. 12, 2007).

²⁸ Reuters, *Motorola Warns of Big Shortfall* (Mar. 22, 2007).

²⁹ *Eleventh Competition Report*, ¶ 163 (noting that 41% of subscribers used text messaging in the fourth quarter of 2005).

to provide consumers with the most advanced and desired devices, given the carrier's particular business model, technology constraints, and the competitive availability of various phones.³⁰

Handset manufacturers vigorously compete to offer the most innovative and cutting edge products and services to wireless customers. For example, Motorola recently unveiled the MotoRAZR maxx Ve, which comes with EV-DO for data, an FM radio, Bluetooth and a 2-megapixel camera with autofocus.³¹ Sony Ericsson has introduced the 2750, which is its first HSDPA phone for the North American market and which also supports true push email service that can be tied to an Exchange ActiveSync server so the customer can receive and send emails, as well as other Java-based email programs from third parties.³² LG Electronics recently announced a "global collaboration" with Google by which Google service, including Google Maps, Gmail, and Blogger Mobile, will be preloaded on LG's handsets.³³ In connection with Sprint Nextel's joint venture with various cable operators, manufacturers also are developing handsets that include such features as allowing customers to control remotely digital video recorders, access cable program guides, and obtain email from their broadband accounts.³⁴ In short, innovation in the wireless handset market is alive and well.³⁵

³⁰ Lowenstein Statement, at 2-4.

³¹ See CTIA 2007: In Depth, available at www.phonescoop.com

³² *Id.*

³³ Press Release, "LG Electronics and Google Team Up to Enhance the Mobile Experience" (Mar. 28, 2007) available at http://www.lne.com/about/press_release/detail/PRO|NEWS^PRE|MENU^PRER|MENU_20357_PRE|MENU.jhtml

³⁴ Marguerite Reardon, *Sprint Nextel, Cable to Test Cell Service*, CNET News.com (Apr. 10, 2006); Marguerite Reardon, *Cable Goes for the Quadruple Play*, CNET News.com (May 30, 2006).

³⁵ See, e.g., "Obstacles in the Mobile Platform: A Panel Discussion," IT Conversations, June 30, 2005, available at <http://www.itconversations.com/shows/detail810.html> ("Despite the

Wireless customers also enjoy a variety of pricing options for handsets, including getting them for free. As Skype acknowledges, handsets sold by carriers in the U.S. are highly subsidized. *Skype Petition*, at 13. As a result, customers signing service contracts for wireless service often receive discounts of \$50 to \$80 from the cost of the handset, which allows some consumers to pay nothing for a handset instead of paying \$100 or more for the device.³⁶ That wireless handsets are so affordable is one reason that wireless penetration in the United States continues to grow, exceeding 71 percent in 2005.³⁷

The RAZR V3 phone exemplifies how the current wireless market works to develop innovative products, fulfill user demand, and reduce prices to consumers, even for increased technology, and at a rapid pace.³⁸ Introduced into the U.S. market in November 2004 as a GSM phone exclusively through Cingular, the ultra thin RAZR quickly became popular as a high-end phone, selling for around \$500 with a two-year service agreement. In just three years, as demand for the RAZR swelled, the phone has become available through many other U.S. and foreign carriers, with a steady decrease in price.

challenges, the panelists report that services such as wireless Enhanced 911 (E911), travel and roadside assistance, turn-by-turn driving, and photomarking are starting to flow to consumers on their GPS-enabled mobile phones. Businesses are also harnessing the ubiquitous mobility of these and other services such as inventory tracking, timesheets, supply chain and dispatch management”).

³⁶ Marguerite Reardon, *Will ‘Unlocked’ Cell Phones Free Consumers?*, CNET News.com (Jan. 24, 2006).

³⁷ *Eleventh Competition Report*, ¶ 158. The subsidization of handsets is a direct consequence of the Commission’s decision from the outset of the wireless industry to treat the handset for regulatory purposes as an integral part of the carrier’s network and to permit the bundling of handsets and wireless service, as discussed below. While Skype may question the utility of such policies, changing course at this juncture would have serious technical, regulatory, and social ramifications, none of which Skype bothers to address.

³⁸ Lowenstein Statement, at 3-4.

The RAZR V3 was innovative in form, featuring a unique ultra thin design and a hardened-glass keypad. The RAZR V3 included 5.5 MB of usable memory capacity, and a camera with resolution of 0.3 megapixels. Motorola released a CDMA version of the device, the RAZR V3c, distributed by Verizon Wireless, ALLTEL and other CDMA carriers at the end of 2005. The CDMA version was slightly thicker than the GSM version, but had more memory (30 MB) and a 1.3 megapixel camera. The initial Cingular RAZR was black, but, Motorola continued to introduce the RAZR in different colors, at first, with a pink RAZR in various shades available from Cingular, Verizon, and T-Mobile. Motorola teamed up with Dolce & Gabbana to release a gold RAZR phone. As new models appeared, the RAZR featured more memory, a better resolution camera, a microSD card slot for additional memory, Bluetooth functions, and music players (e.g., iTunes, Motorola's Digital Audio Player), and supported carrier-specific applications, such as T-Mobile's MyFaves, and Verizon Wireless's V-CAST multimedia services.

Despite the increases in form, function and style, prices for the RAZR have fallen dramatically. When Verizon Wireless introduced the V3c in December 2005, the phone was sold at a retail price of \$199 after a \$100 rebate with a two-year customer agreement. The Verizon Wireless website offers silver and pink RAZR V3m phones, featuring Bluetooth functions, removable memory, enabled for V-CAST music, for \$49.99, after an on-line discount, with a two-year contract.

And, the diversity in RAZRs is reflected in choices for consumers among RAZR models and carriers. On its web-site, T-Mobile offers the RAZR V3 in a variety of colors for \$49.99 after discount and rebate with qualifying plan (or a buy-one-get-one-free offer); plus, the V3t with an MP3 player and memory card slot, for \$99.99 after discount and rebate with qualifying

plan; plus the V3i Dolce-Gabbana gold RAZR, with MP3 player and memory slot, for \$149.99, after discount and rebates with qualifying plan.

By July 2006, Motorola announced that it had shipped 50 million RAZRs, making it one of the most popular phones ever distributed. The RAZR is an example of just one product that has been introduced successfully into the wireless market, at first with limited distribution, which then became available through more carriers, and gradually developed better technology and more functions, at lower prices, as carriers responded to consumer demand. If Apple's iPhone proves to be a similar game-changing device, the market will respond to consumer demand. Other carriers will reach distribution arrangements for the device. Equipment vendors will be driven to design their own iPhone-like devices. The iPhone will again show what the RAZR and many other devices have shown that in a competitive market such as wireless, there is no need to impose regulations to achieve consumer choices when consumer demand achieves that goal faster.

D. Skype's Claims of Competitive Harm Are Incorrect.

Despite these facts, Skype incorrectly argues that consumers suffer harm because certain allegedly desirable features of handsets are suppressed. There is no basis for this claim.

First, Skype begins with the premise that handset manufacturers "depend largely on carriers to sell their devices," such that "no manufacturer can afford not to 'play ball' with the largest wireless carriers." *Skype Petition*, at 13, 22. Many handsets in the United States (though by no means all) are distributed by carriers (either as wholesalers or as retailers).³⁹ But there is nothing wrong with that (nor is anything claimed to be wrong with it). Wireless carriers

³⁹ *See id.* at 1.

have every interest in ensuring that wireless devices are efficiently distributed and that they are made available to consumers at low cost.⁴⁰ Nor is there anything wrong with the widespread practice of subsidizing wireless devices. *Cf. Skype Petition*, at 13. As the Commission has recognized, up-front subsidies are pro-competitive and benefit consumers.⁴¹ Indeed, subsidies are used in other industries without such scrutiny, and, in the wireless industry, remain one of the means by which U.S. consumers are able to get the “latest and greatest” phones.⁴²

When the structure of the wireless sector was far *less* competitive than today, the Commission expressly determined that the bundling of wireless handsets and service posed no threat to competition in the market for wireless devices and offered substantial benefits to consumers.⁴³ Skype argues that circumstances are different now because the largest national wireless providers account for a higher percentage of the market than any wireless provider did in 1992. *Skype Petition*, at 21-22. But it ignores the fact that each carrier faces much greater competitive pressure today than any wireless carrier faced in 1992, when each local wireless

⁴⁰ *Cf. Wireless Antitrust Opinion*, 385 F. Supp. 2d at 429:

Besides lack of proof, the plaintiffs’ contention that defendants’ distribution practices have worked to inflate handset prices faces another insurmountable hurdle: it makes no economic sense. Since the defendants do not manufacture handsets, and compete with each other through offering handsets with service, it is against each defendant’s self-interest to discourage competition among handset manufacturers and thereby to allow handset manufacturers to enrich themselves at a defendant’s expense.

⁴¹ See, e.g., *Policy and Rules Concerning the Interstate, Interexchange Marketplace*, 16 FCC Rcd 7418, ¶ 6 (2001) (bundling is both “an efficient distribution mechanism and an efficient promotional device that allows consumers to obtain service and equipment more economically than if it were prohibited”).

⁴² Lowenstein Statement, at 5.

⁴³ See *Bundling of Cellular Customer Premises Equipment and Cellular Service*, 7 FCC Rcd 4028, 4032 (1992) (“*Cellular CPE Bundling Order*”).

market had, at most, two facilities-based carriers.⁴⁴ And the number of significant competitors is growing, with new spectrum available for auction and aggressive entry by a consortium of cable providers. The pressure to offer consumers desirable features and devices is thus much greater today than it was in 1992, as evidenced by the rapid innovations in devices, shortening product cycles, and proliferating device models.

The nature of wireless networks makes close collaboration between network providers and device manufacturers essential.⁴⁵ As described below, wireless devices are *part* of the end-to-end network: their operation substantially affects not only the quality of an individual subscriber's service but the overall efficiency and quality of the service of other customers as well.⁴⁶ And any number of desirable wireless services – including multimedia services, various messaging services, and location-based service to name just three examples – depend on implementation both within network switches and on the devices. Devices like the Blackberry and iPod similarly depend upon tight integration between the hardware, software, and network to enable a high-quality and successful user experience.⁴⁷

⁴⁴ *Id.* at 4029 (noting that in light of “cellular duopoly market structure” that “it is difficult to conclude that the cellular service market is fully competitive”).

⁴⁵ See Higgins Statement, at 1-7.

⁴⁶ See *Wireless Antitrust Opinion*, 385 F. Supp. 2d at 409:

Because wireless service providers cannot implement more efficient service unless subscribers are using handsets that operate on their respective networks, handsets sold for use in the U.S. wireless services market are developed by manufacturers in collaboration with the wireless service providers. The quality of handsets available to subscribers is particularly important to the service providers because the use of ‘outmoded’ handsets not only affects the quality of that subscriber’s service, but also diminishes the quality of service to other subscribers.

⁴⁷ See Lowenstein Statement, at **6-9**.

Again, however, there is nothing wrong with that. In a competitive market, wireless service providers have every incentive to make desirable devices and features available to consumers. A manufacturer of a desirable device does not have to “play ball” with any particular wireless service provider; it needs to find only one of the many providers to support its device. If wireless carriers were blocking the introduction of desirable devices or features, there would be evidence of it, and, as discussed below, there is not.⁴⁸

Skype also posits that there may be device innovations that consumers would welcome but that would reduce service revenues; service providers would therefore not adopt such features. See Skype Petition, at 23-24. It is important to recognize at the outset, however, that this issue does not at all suggest any market failure that regulation could or should address.⁴⁹ Assuming hypothetically that some device feature would eliminate or reduce some category of service revenues, even in an ideally competitive market no service provider would support that feature unless it was otherwise compensated. That compensation might come in the form of new customers, greater use of other services, higher prices paid for devices, or in some other way. But if the inclusion of the feature actually imposes costs on the service provider – as Skype suggests could be the case – it would be self-destructive for the service provider to promote it. And if regulation *forced* the provider to engage in that type of sacrifice, the provider would have no choice but to recover the cost. In that circumstance, regulation can

⁴⁸ See Wireless Antitrust Opinion, 385 F. Supp. 2d at 425 n.30 (“At no point have plaintiffs explicitly argued, much less proven, that any defendant’s control over which handsets will be approved for use with its respective network has actually foreclosed manufacturers from the market for handset sales in the U.S.”).

⁴⁹ This hypothetical situation thus is not at all analogous to the situation with **LNP**. Skype Petition, at 24-25. The basic obstacle to adoption of **LNP** is one of collective action: as the Commission recognized, carriers that support **LNP** cannot implement it without industry-wide cooperation (something that competition – i.e., rivalry – would not achieve).

create a forced subsidy and thereby grant an advantage to a favored beneficiary of that regulatory largesse. But it cannot improve market performance in a competitive market. To the contrary, such regulatory meddling will misallocate resources and reduce incentives for investment in wireless services – the opposite of the result that the Commission’s deregulatory policies have so successfully promoted.⁵⁰

Second, Skype cannot establish an empirical basis for its claim of consumer harm “at the device layer.” *Skype Petition*, at 13-16. In arguing that carriers have stifled innovations that consumers want, Skype points to just two examples – the omission of WiFi capability from a single Nokia smartphone and Verizon Wireless’s decision not to support certain Bluetooth features on some of its handsets.

Such meager examples provide no evidence that carriers are suppressing desirable features or innovations. Wireless carriers have taken different approaches to enabling the Bluetooth and WiFi features of their phones.⁵¹ For example, reports indicate that the new Apple iPhone will have WiFi capability;⁵² so does the HP iPAQ⁵³ and other available devices. This proves that competition is working, and that if consumers value these features they can obtain them from a carrier that makes these features available.⁵⁴ Wireless carriers, including

⁵⁰ Hazlett Statement, at 4.

⁵¹ See, e.g., Verizon Wireless, *Bluetooth Functionality Chart*, http://support.vzw.com/pdf/BT_Chart_Handsets.pdf; see also Wu, *Wireless Net Neutrality* at 29-30.

⁵² David W. Barden, Bank of America Equity Research Conference Chatter, *Keynote Highlights from Ralph de la Vega at the '07 BofA Telecom, Media Conference* (Mar. 28, 2007).

⁵³ <http://h10010.www1.hp.com/wwpc/us/en/sm/WF04a/215348-215348-64929-314903-215381.html>.

⁵⁴ In the settlement of a class action lawsuit against Verizon Wireless concerning its disclosures of what Bluetooth functions were enabled on a Motorola 710 handset, the Settlement Class recognized “Verizon Wireless’ absolute right to determine which functions

Verizon Wireless, have sought to address other consumer priorities.⁵⁵ For example, Verizon has not enabled Bluetooth file transfer capabilities due to concerns that it could facilitate illegal access to personal information that customers store on their phones, and to prevent the illegal exchange of copyrighted material such as games, music, and ringtones.⁵⁶ As the standards for these interfaces improve and become more rigorous, it is likely that service providers will become more willing to enable various features.

Carriers that do not approve phones with WiFi capabilities do not foreclose competition from WiFi technology. Consumers interested in making WiFi-based voice calls do not need to purchase service from a wireless carrier. They can obtain a WiFi handset. For example, a variety of equipment manufacturers (including LinkSys and NetGear) have begun producing handsets to be used on WiFi networks using Skype's VoIP service.⁵⁷ The decision of some licensed wireless carriers not to allow their handsets to be used for competing unlicensed services is not anticompetitive, but pro-competitive, and is no different from the decision not to

and content will be included, or not included, in the Motorola V710 telephone offered for sale or marketed by Verizon Wireless at any time now or in the future." *Opperman v. Cellco Partnership*, Stipulation of Settlement § 8(e), Case No. BC 326764 (Cal. Super. Ct. 2005).

⁵⁵ See Higgins Statement, at 18 (WiFi functions add to cost, size and weight of phone and requires additional testing and validation).

⁵⁶ See, e.g., M. Repo, et al., *Going Around with Bluetooth in Full Safety*, F-Secure, http://www.securenetwork.it/ricerca/whitepaper/download/bluebag____bre.pdf (May 2006); A. Laurie, et al., *Bluetooth: Serious Flaws in Bluetooth Security Lead to Disclosure of Personal Data*, The Bunker, <http://www.thebunker.net/resoues/bluetooth> (updated Oct. 14, 2004).

⁵⁷ *Google and Skype Fund FON as Cisco Joins*, Computer Business Review Online (Feb. 7, 2006), http://www.cbronline.com/article_feature.asp?guid=2A93B2D6-BE8B-4EB8-99CD-EDF7DFB80C65 ("Skype has partnerships in place with hotspot aggregators such as Boingo and The Cloud, and already offers WiFi-enabled Skype handsets made by, among others, Linksys. A visit to any internet cafe in a big city will reveal countless individuals calling home over the P2P VoIP service, so if those connections can be wireless-enabled, it should only stand to gain more users.").

allow a handset to be used to access a competing licensed wireless carrier's service, or the decision of McDonalds not to sell Burger King's fries alongside its own.⁵⁸

These policies ensure that companies can maintain the integrity of their products and brand and recoup their investments, all of which is necessary to promote innovation and competition. These concerns are particularly acute with respect to WiFi-based services, over which the licensed network provider has no control and which may not offer the same quality of service as licensed networks. If an individual carrier determines, for whatever reason, that such a product would not provide a benefit to its business, it makes perfect sense for the carrier to decline to support such a device, and a regulatory rule that forced a carrier to support such a device would undermine investment incentives and hurt consumers.⁵⁹ Indeed, competition between technologies, whether licensed vs. licensed or licensed vs. unlicensed is exactly what the Commission has sought to promote in the wireless industry.⁶⁰ For the Commission to mandate that mobile devices include the capability of operating on any particular interface would fly in the face of its successful policy of encouraging competition among technologies.

⁵⁸ Cf. *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, L.L.P.*, 540 U.S. 398, 410 (2004) (“[I]nsufficient assistance in the provision of service to rivals is not a recognized antitrust claim.”).

⁵⁹ Hazlett Statement, at 11-12; see also Lowenstein Statement, at 12-14.

⁶⁰ *Eleventh Competition Report*, ¶ 103 (noting that standard-based competition facilitates “greater product variety and greater differentiation of services,” and enhances price competition by “mak[ing] it more difficult for carriers to coordinate their behavior”); see also Joseph Farrell & Michael D. Topper, *Economic White Paper on National Third Generation Wireless Standards* at 1-2 (Nov. 1998) (“Government should only mandate a standard when there is clear and convincing evidence that the market will fail to achieve economically efficient results and that this market failure will be worse than the likely inefficiencies of government-mandated standards. In the case of third generation wireless standards, on the contrary, there is much evidence that market competition among multiple third generation standards will better achieve the efficiency goals that a national standard might be thought to confer.”).

Third, Skype asserts that locking “acts as a barrier for consumers who may wish to switch carriers,” *Skype Petition*, at 16, but that claim does not bear out under scrutiny. First, not all carriers lock handsets – Verizon Wireless, for example, does not lock handsets provided to post-paid customers. Second, handset locks help to protect carriers’ handset subsidies and thereby promote such subsidies, which is good for consumers.⁶¹ Indeed, as noted above, subsidies actually *reduce* the cost of switching carriers in many cases, by reducing the cost of purchasing a new compatible device for use on a new provider’s network. Third, as Skype acknowledges, it is possible for consumers to purchase unsubsidized, unlocked handsets or to unlock handsets at the end of a contract. Consumers do not purchase such devices because they prefer to accept subsidies. Fourth, the average wireless subscriber purchases a new device every 12-18 months.⁶² Carriers have an important interest in promoting the use of new devices not only because they enable delivery of new services but also because each successive generation of devices is more efficient (and thus less expensive to serve) than the one it replaces. The notion that many consumers are prevented from switching to a preferred carrier because they do not wish to part with an existing device is simply inconsistent with market facts.⁶³

Skype incorrectly claims that providers’ locking practices in Europe and Asia differ substantially from those in the United States. For example, in the UK, SIM-locking is

⁶¹ Hazlett Statement, at 6-7.

⁶² See J.D. Power and Associates, Press Release, “Sony Ericsson Ranks Highest in Wireless Mobile Phone Customer Satisfaction (Nov. 16, 2006).

⁶³ See also *Wireless Antitrust Opinion*, 385 F. Supp. 2d at 430 (rejecting the claim that handset locking reduces churn or causes anticompetitive effects in the market for handsets).

widespread, as it is in many other countries, including Japan.⁶⁴ When providers offer significant device subsidies, the devices are often locked to help protect their investments and deter fraud.⁶⁵

E. Skype's Claim That Innovation Is Being Suppressed Is Also Incorrect.

Skype argues that even though competition is sufficient to prevent carriers from exercising market power by restricting output or raising prices, *see Skype Petition*, at 24, wireless carriers nevertheless have the incentive and the ability to suppress desirable innovations in devices and applications. That argument is profoundly contrary to the facts and economic logic. Wireless carriers have every incentive to *promote* innovation in devices and applications, because those innovations enhance demand for the wireless services that carriers offer.⁶⁶ Skype claims that carriers are an innovation “bottleneck,” *id.*, but the argument ignores the fact that there are multiple carriers – and additional providers, like MNVOs – that must attempt to discover and promote innovations in both devices and applications to attract new customers.⁶⁷ The marketplace bears out this theory: there has been extraordinary innovation in

⁶⁴ See <http://www.ofcom.org.uk/consumeradvice/mobile/switching/switch/> (“Whether you are a post-paid (contract) or pre-paid user, you can keep your current mobile phone by requesting that the SIM lock on your mobile to be removed. Usually, mobile service providers require a minimum contract or service period to expire before they unlock your phone. Most service providers charge a fee for this service.”).

⁶⁵ In some countries where SIM-locking was restricted, regulators have lifted such restrictions with respect to 3G devices, evidently recognizing that restrictions on SIM locking prevents subsidies and thus discourages technological progress. *See J. Funnell, et al., Credit Suisse, Pain Before the Gain* at 17-18 (June 21, 2006). Analysts have suggested that restrictions on SIM-locking and subsidies *dampen* competition and raise providers' margins. *See id.*

⁶⁶ Hazlett Statement, at 17-19.

⁶⁷ *Id.*

both wireless devices and in applications; all evidence indicates that such innovation is accelerating.⁶⁸

Verizon Wireless, for example, has invested billions of dollars in upgrading its network to create the first and one of the most widely deployed broadband capability in the United States. Starting in 2003, Verizon Wireless has implemented EV-DO (“Evolution – Data Optimized”), and that capability is now available to 200 millions Americans. Verizon Wireless recently began upgrading its network to enable the second-generation EV-DO capability, known as “Rev. A”. Compared to the prior generation 1xRTT standard, EV-DO is both much faster and much more efficient, and thereby makes possible broadband applications that were not possible using 1xRTT and offers data communications at much lower cost. Even the first generation EV-DO technology is five to eight times faster than 1xRTT, and transmits the same amount of data at approximately one-fifth the cost as compared to 1xRTT.

As a result of these superior capabilities, EV-DO allows for the high-speed transmissions of multimedia content, including video, music, games, and Internet web pages. From the outset, EV-DO capability has been valued by enterprise customers who demand mobile high-speed data communications. Today, the implementation of EV-DO (and other wireless broadband capabilities) has led to an explosion of application development specifically for wireless devices. And, it has driven competing carriers to develop their own broadband services, such as Sprint’s investment in EVDO and Cingular’s investment in EDGE and then UMTS.

Wireless consumers have access to vast numbers of innovative applications, from text messaging to ring tones to various forms of content, provided by both carriers and third

⁶⁸ *Eleventh Competition Report*, ¶¶ 136-140; Lowenstein Statement, at 6-9.

parties.⁶⁹ But, the average wireless handset is not just a mini PC; it has capacity limitations, which requires much work to deliver the best user experience.⁷⁰ Moreover, the fact that a wireless handset can be used to access many forms of content must be considered in light of other aspects of the user experience, including, e.g., controls that parents may want to be comfortable that children are not accessing inappropriate content, billing issues for third-party applications, security, and customer care for products and applications which generally falls to the wireless carrier.⁷¹

While Skype criticizes providers' offering of proprietary applications – the so-called “walled garden,” *Skype Petition*, at 18 – it ignores the substantial benefits that such proprietary applications bring and the competitive forces that may lead providers to make such choices. As Professor Hazlett explains, mobile networks and applications are extremely complex, and the offering of proprietary applications can help to ensure seamless operation of infrastructure, devices, and applications.⁷² That integration in turn helps to make new applications available to consumers; if regulation prevents wireless carriers from engaging in this type of innovation, consumers will suffer. Consumers are free to select among the multiple platforms available – including those offered by MVNOs – and every carrier must make judgments about which aspects of service will appeal to consumers and justify investment. Furthermore, the availability of these applications does not prevent carriers from also providing open access to other unaffiliated applications.

⁶⁹ See Lowenstein Statement, at 10.

⁷⁰ *Id.* at 11.

⁷¹ *Id.* at 10-12; see also Higgins Statement, at 10-17 (explaining various threats to security of handsets and wireless networks).

⁷² See Hazlett Statement, at 2, 7-8, 17-19.

Where innovations have not taken hold, there is no reason to conclude that this reflects anything other than consumers' preferences. Consumers want higher quality and competitively priced service first and foremost.⁷³ Only 20 percent of consumers express a preference for "devices with more functionality and features."⁷⁴ Verizon Wireless, for example, has invested massively to establish its position as the most reliable carrier with the highest quality network, an approach that has earned Verizon Wireless a leading position in the industry.⁷⁵

Ignoring the actual preferences of consumers, proponents of regulation have graded wireless carriers based on vague notions of how open wireless networks are to competing content, applications, devices, and services.⁷⁶ Applying this self-made test, Professor Tim Wu concludes that "Verizon Wireless scores the most poorly across every category, while T-Mobile scores the best. AT&T and Sprint are in the middle."⁷⁷ But as demonstrated above, these rankings – and the test itself – are out of touch with what consumers actually care about.

⁷³ See J. Porus, Harris Interactive, *What Will Wireless Consumers Want Next?* Wireless Wave (Spring 2006) (78% of consumers express preference that wireless carriers "improve coverage and service quality, while 64% express preference that wireless carriers "provide good value.").

⁷⁴ *Id.*

⁷⁵ See, e.g., R. Klugman, *et al.*, Prudential Equity Group, *VZ: 4Q Inline But FiOS Costs Remain High* at Figure 3 (Jan. 30, 2007) (Among four national wireless carriers, Verizon is first in terms of the number of its post-paid wireless subscribers and the number of post-paid gross adds and net adds in four of the last five quarters (4Q05-4Q06)); Consumer Reports, *Cell Phone Service: Providers in Profile* (Jan. 2007), http://www.consumerreports.org/electronics-computers/cell-phones-service/cell-phone-service-1-07/providers/0107_serve_pro-1.htm (Verizon Wireless is "[c]onsistently a top performer in this year's survey and in our earlier ones. Also among the better national carriers in its responsiveness to customer questions and complaints.").

⁷⁶ Tim Wu, *Wireless Net Neutrality* 20, New America Foundation Working Paper #117 (2007) ("it is easy to rate the [wireless] carriers on the degree to which they respect *Carterfone*, network neutrality, and open platform development principles").

⁷⁷ *Id.*

Verizon Wireless ranks first among consumers, while T-Mobile – the favorite of regulation proponents – ranks last in number of subscribers.⁷⁸

Skype offers no evidence to support the claim that carriers are suppressing desirable software applications to consumers' detriment. To the contrary, the sole examples it points to tend to prove the opposite.

First, Skype argues that carriers' terms of service "make it impossible for consumers to use the full features of 3G devices." *Skype Petition*, at 18. But Verizon Wireless places limitations only on the use of flat-rate (not metered) data plans, and those limitations are directed at the use of certain types of applications that are inherently bandwidth intensive, such as continuous uploading, downloading or streaming of audio or video programming or games, server devices or host computer applications, automated machine-to-machine connections or peer-to-peer (P2P) file sharing, and the use of a wireless connection as a substitute or backup for private lines or dedicated data connections.⁷⁹ Those limitations reflect the fact that wireless

⁷⁸ See, e.g., R. Klugman, *et al.*, Prudential Equity Group, *VZ: 4Q Inline But FiOS Costs Remain High* at Figure 3 (Jan. 30, 2007) (Among four national wireless carriers, T-Mobile ranks last in the number of its post-paid wireless subscribers and the number of post-paid gross adds in four of the last five quarters (4Q05-4Q06)).

⁷⁹ Verizon's flat-rate plans include NationalAccess, BroadbandAccess, and GlobalAccess. The Terms and Conditions for these plans specify that wireless devices may be used only for "(i) Internet browsing; (ii) e-mail; and (iii) intranet access" and may not be used for **any** other purpose, including "(i) continuous uploading, downloading or streaming of audio or video programming or games; (ii) server devices or host computer applications, including, but not limited to, Web camera posts or broadcasts, automatic data feeds, automated machine-to-machine connections or peer-to-peer (P2P) file sharing; or (iii) as a substitute or backup for private lines or dedicated data connections." In addition, the Terms and Conditions provide a benchmark for what Verizon Wireless considers excessive network use, stating that "[a] person engaged in prohibited uses, continuously for one hour, could typically use 100 to 200 MBs, or, if engaged in prohibited uses for 10 hours a day, 7 days a week, could use more than 5 GBs in a month." See Verizon Wireless, *BroadbandAccess*, http://www.verizonwireless.com/b2c/store/controller?item=planFirst&action=viewPlanDetail&sortOption=priceSort&catId=409&cm_re=Global---Plans---Wireless%20PC%20Card%20Plans%20BroadbandAccess.

bandwidth is a shared (not a dedicated) resource: unusually intensive use of data services thus risks degrading quality of service and raises costs for other users.”

Second, Skype claims that there are “application locks” that make running unaffiliated applications difficult. But there is an entire industry of developers that are designing software and applications for use on wireless devices. There is no evidence that developers have been frustrated by the absence of a usable development platform. At the same time, wireless providers have an urgent need to ensure that applications that are loaded onto wireless devices do not interfere with the proper operation of the device or harm the network.⁸¹ Given the rapid innovation of basic network technologies – and the need for compatibility between handset and network – regulators cannot, and should not, adopt a mandatory set of standards. In many competitive industries, competitors have adopted mutually incompatible standards – think Xbox vs. Playstation; Windows vs. Apple; Blackberry vs. Treo; Skype vs. 8X8. As described above, there is no evidence that a government-mandated standard would improve on market results.

The Commission correctly determined at the beginning of the digital era that it would not mandate any single wireless network protocol. The Commission has repeatedly recognized the benefits of allowing the market to choose the best and most efficient wireless technologies. There is no reason to depart from that approach now.

⁸⁰ As Professor Hazlett points out, “acceptable use policies” are used by providers that have no conceivable market power; they help to ensure that all subscribers have an acceptable level of service. Thus, “these limits help [to] create a competitive network; indeed, [such] rules are *productive inputs* into the supply of new broadband options.” Hazlett Statement, at 2.

⁸¹ See Higgins Statement, at 1-3, 7-10.

Competition – far better than regulation – “ensure[s] the lawfulness of rate levels, rate structures, and terms and conditions of service.”⁸² Furthermore, when markets are competitive, unneeded regulation discourages investment and innovation.⁸³ Regulations that would restrict carriers’ ability to promote and profit from continued innovation are unjustified and affirmatively harmful. Accordingly, Skype’s request to begin a rulemaking to adopt such regulation should be denied.

III. THE REGIME SOUGHT BY SKYPE WOULD BE HARMFUL AND WOULD NOT BENEFIT CONSUMERS OF WIRELESS SERVICES.

A. Significant Technical Differences Exist Between Wireline and Wireless Networks.

Skype ignores the fundamental differences between wireless and wireline networks and the necessity that the operation of wireless handsets be closely coordinated with operation of the wireless network. Congress and the Commission developed different regulatory regimes for wireline and wireless networks in part because of the technical differences between the two

⁸² *Implementation of Sections 3(n) and 332 of the Communications Act*, Second Report and Order, 9 FCC Rcd 1411, ¶ 173 (1994); *see also Will v. Comprehensive Accounting Corp.*, 776 F.2d 665, 673-74 (7th Cir. 1985) (“[W]hen markets are competitive, the process of sellers’ rivalry and buyers’ choice produces the best results.”).

⁸³ *See, e.g., Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks*, Declaratory Ruling, WT Dkt. No. 07-53, ¶ 2 (Mar. 23, 2007) (“*Wireless Broadband Internet Access Order*”) (a “minimal regulatory environment for wireless broadband Internet access service . . . promotes our goal of ubiquitous availability of broadband to all Americans”); Written Statement of Chairman Martin before Senate Commerce Committee (Feb. 1, 2007) (“[T]he Commission has tried to make decisions based on a fundamental belief that a robust, competitive marketplace, not regulation, is ultimately the greatest protector of the public interest.”); Report, *2002 Biennial Regulatory Review*, 8 FCC Rcd 4726, ¶ 16 n.27 (2003) (“[T]he development of competition and the operation of market forces mean that government oversight and regulation can and should be reduced.”) (citing H.R. Conf. Rep. No. 104-458, at 178 (1996)); *Implementation of Sections 3(n) and 332 of the Communications Act*, Second Report and Order, 9 FCC Rcd 1411, ¶ 173.

services, and those differences remain. Skype's Petition ignores them. It asks the Commission to abandon a functioning Title III regime and shoe horn wireless into an ill-fitting wireline framework.

In contrast to wireless technology, wireline networks were built to uniform transmission standards. These uniform transmission standards obviate concerns about compatibility with heterogeneous end-user interface technologies. In addition, wireline equipment communicates by wire rather than radio, and thus, in contrast to wireless technology, issues of radio frequency interference are much less significant among wireline users.

As a result of these fundamental technical differences, a wireless handset is an integral part of the CMRS provider's network, unlike the wireline world in which the carrier's network and end-user equipment are easily distinguished. A wireless network is comprised of both cell sites *and* mobile stations. Indeed, a network's effective coverage area can only be defined in relation to the design and power levels of both the fixed antennae that serve as "base stations" and the portable transceivers contained in each subscriber's wireless telephone. Similarly, a wireless voice or data session involves continuous communication between base and mobile stations that is separate and apart from the content of the call. For example, as a wireless customer travels, the handset is constantly using "control channels" to stay in contact with multiple base stations to allow a seamless handoff and allow the customer to continue enjoying uninterrupted wireless service. Accordingly, handheld devices are not severable from the rest of the wireless network.

Even when a carrier extensively manages the devices on its network, unforeseeable consequences can arise from the deployment of new services. For example, in an effort to offer a unique push-to-talk service, Verizon Wireless initially planned to deploy what was thought to

be an “innocuous ‘presence’ service” that would indicate the network status of individuals in a user-defined “buddy list.”⁸⁴ However, Verizon Wireless ultimately decided not to support the service after it was determined that the feature would disrupt the network by causing an unusually high number of dormant to active transitions on push-to-talk enabled phones, which not only severely impacted Verizon Wireless’ cellular data network but also upset the normal operating model for its voice network.⁸⁵ If wireless handsets are dissociated from the network and unapproved devices and applications are deployed on a large scale, a similar result could occur that would impede the operation of the network and consumers’ use of wireless services.

B. Skype’s Regime Would Undermine the Communications Act’s Model for Wireless Services.

The technical differences carry through to the statutory framework for wireless service, which is built on the basic concept that wireless licensees are responsible for all equipment and operations that use radio spectrum. In order to comply with a variety of Commission rules – including both technical rules and public interest obligations – wireless carriers must be able to manage all aspects of their network. Title III of the Communications Act requires every device that transmits radio energy to be licensed or otherwise authorized by the Commission.⁸⁶ A CMRS license authorizes not only base station operations, but also all handsets and other devices used by customers on the CMRS provider’s network, which are regulated as “mobile stations” under that license.

⁸⁴ Higgins Statement, at 8-10.

⁸⁵ *Id.*

⁸⁶ 47 U.S.C. § 301 (“No person shall use or operate any apparatus for the transmission of energy or communications or signals by radio... except under and in accordance with this chapter and with a license in that behalf granted under the provisions of this chapter.”).

Under Title III of the Communications Act and the Commission’s “exclusive use” licensing regime, carriers are responsible for ensuring that the equipment utilizing their assigned spectrum satisfies Commission regulations designed to avoid harmful interference. These requirements are imposed on both base and mobile stations.

Title III licensees are responsible for compliance with technical specifications that limit the potential for interference with adjacent licensees. These include limits on effective radiated power for mobile stations⁸⁷ and limits on spurious emissions.⁸⁸ In addition, all devices used on a CMRS network must be “certificated” by the Commission pursuant to Parts 2 and 15 of the Commission’s rules.⁸⁹ The reason for this certification process is to guarantee that devices meet the technical requirements for a given service and do not interfere with or otherwise disrupt wireless networks. Though manufacturers are initially responsible for ensuring that equipment complies with the applicable standards, the licensee violates the technical interference rules if it places a non-certificated device (or a non-compliant certificated device) on the network that causes harmful interference to another operator.

The Commission’s rules are clear that CMRS providers are accountable for all devices on their networks. Section 22.3 of the Commission’s rules states that “[a]uthority for subscriber to operate mobile or fixed stations in the Public Mobile Services ... is included in

⁸⁷ See e.g., 47 C.F.R. § 22.913(2) (establishing an effective radiated power limit of 7 Watts for cellular mobile transmitters); *id.* § 24.232(c) (limiting Broadband PCS mobile/portable stations to “2 watts EIRP peak power” and requiring that “the equipment must employ means to limit the power to the minimum necessary for successful communications”).

⁸⁸ See e.g., 47 C.F.R. § 22.917 (establishing limits on out of band emissions for cellular equipment); *id.* § 24.238 (establishing limits on out of band emissions for Broadband PCS).

⁸⁹ See 47 C.F.R. § 2.901 *et seq.*; *id.* § 24.51 (requiring that “each transmitter utilized for operation under this part and each transmitter marketed, as set forth in § 2.803 of this chapter, must be of a type that has been authorized by the Commission under its certification procedure for use under this part”).

the authorization held by the licensee providing service to them.”⁹⁰ Section 22.305 in turn states that “[s]tation licensees are responsible for the proper operation and maintenance of their stations and for compliance with FCC rules.”⁹¹ Under Section 312 of the Communications Act, the Commission may revoke an authorization or impose sanctions on licensees that violate provisions of the Act or the Commission’s rules.⁹² In order to ensure that their networks operate in compliance with all Commission mandates, CMRS providers must be able to manage all of the stations on their networks, including handsets. Skype’s proposals ignore this critical fact.

C. Skype’s Regime Would Prevent Wireless Carriers from Managing Their Network to Minimize Interference and Optimize Customer Experience.

In addition to ensuring devices satisfy Commission requirements, Verizon Wireless has rigorous internal procedures designed to ensure that all devices function properly on its network.⁹³ This process ensures that devices placed on Verizon Wireless’s network do not harm the network or degrade the experience of other users, do not interfere with adjacent users, and function as intended by delivering high quality service and functionality to customers.

Skype’s Petition seeks to dissociate handsets and other devices from the wireless network operator, which would deprive carriers of the means to ensure that those devices comply with Commission rules. It would also undermine the proper functioning of wireless

⁹⁰ 47 C.F.R. § 22.3(b).

⁹¹ 47 C.F.R. § 22.305. Similarly, Section 22.927 of the Commission’s rules notes that “[c]ellular system licensees are responsible for exercising effective operational control over mobile stations receiving service through their cellular systems.”

⁹² 47 U.S.C. § 312.

⁹³ See Higgins Statement, at 3-7 (describing in detail Verizon Wireless’s process for ensuring that handsets are compatible with its network and meet FCC specifications).

service. Because wireless devices use a shared spectrum resource, every device and every cell site operating on the network has a specific and calculable impact on the aggregate resources available to all consumers attempting to access a given carrier's resources in a given geographic area. Should any component of the network environment – *e.g.*, an unapproved device – fail to operate as planned, the impact is not only on this component, but also on the network and its ability to serve other subscribers.⁹⁴

Without the ability to manage the devices introduced on their networks, CMRS providers would have no means of ensuring that unapproved devices do not interfere with their other customers, degrading the quality of their service, or with competing networks and devices using adjacent frequency bands.⁹⁵ This increase in the difficulty of interference detection and prevention could well lead to interference levels in “exclusive-use” bands that are comparable to levels that prevail in the unlicensed bands.⁹⁶ Though carriers, as primary licensees, possess greater rights than interfering handset users, the practical difficulty of detecting and isolating the source of interference in a large-scale network would likely prevent interference abatement. Skype would strip carriers of their current ability to manage interference, disserving customers.

A recent experience of Verizon Wireless illustrates the problem. In 2006, unknown to Verizon Wireless, a customer improperly installed a repeater that had been certified to operate

⁹⁴ See *id.* at 20.

⁹⁵ See *id.* at 7 (“If consumers can choose unilaterally what devices and applications to operate on wireless networks, then the controls over how those devices and applications affect the reliability and performance of networks will inevitably not be applied to some devices and applications.”); see *also id.* at 10-17 (discussing security risks to handsets and networks that must be addressed in considering devices and applications used on the network).

⁹⁶ See *e.g.*, Craig Mathias, “The Effects of Interference on General WLAN Traffic,” The Farpoint Group (2007) (showing that cordless phones, other Wi-Fi devices, and even microwaves can cause significant interference with Wi-Fi LANs utilizing the unlicensed 2.4 GHz band).

on a CDMA network. Local engineers immediately began to see a degradation on both the local and surrounding network,⁹⁷ and eventually this single device negatively impacted nearly 200 surrounding cell sites within the New York Metropolitan area, which resulted in tens of thousands of blocked voice and data sessions.⁹⁸ Although Verizon Wireless was able to identify and eliminate the source of this interference, it could have prevented the successful completion of a call into 911 or similar type of critical communication service. This type of interference could become commonplace under a mandate that any device or application be allowed to access any wireless networks, as Skype urges.⁹⁹

D. Skype's Regime Would Frustrate The Commission's Ability to Achieve Emergency Alert and Other Public Interest Goals.

When faced with an issue related to public safety, law enforcement, service accessibility, or another policy goal tied to wireless service, the Commission historically has placed the onus of compliance on CMRS providers. This system of carrier accountability has proven to be a wise approach—it has protected consumers against disruption of wireless service while fulfilling numerous public interest goals. Skype's Petition would undercut it.

Wireless alert systems depend on carriers' ability to ensure that handsets are programmed to receive and transmit alerts. For example, the wireless industry's "Amber Alert" system was developed through the cooperative efforts of carriers and the National Center for

⁹⁷ See Higgins Statement, at 21.

⁹⁸ See *id.*

⁹⁹ *Skype Petition*, at 12. The *Carterfone* exception that purports to prevent a customer from interconnecting harmful customer premises equipment to the wireline network would be meaningless in the wireless world if handsets were severed from the wireless network as Skype urges, since interference problems could degrade the service of the carrier's customers or adjacent users without "harming" the network.

Missing and Exploited Children. It required a technically integrated system that would work on all carrier devices to deliver text messages using a common protocol. Congress has recently chosen this model for implementing a national wireless emergency alert system. The Warning, Alert and Response Network Act (“WARN Act”)¹⁰⁰ directed the Commission to work with an advisory committee to develop technical standards that would build into wireless handsets the capability to receive and transmit government-originated alerts to warn subscribers of natural disasters, weather emergencies, and urgent public safety threats. The WARN Act is premised on wireless carriers’ ability, through the close integration of network and handset, to provide a seamless capability to deliver warnings to customers over their devices using a messaging format. In the regime advocated by Skype, where the network and device are not closely integrated – and, worse, carriers are not able to ensure that only devices meeting their standards are on the network – these critical alert capabilities would be compromised.”

The Commission also has used its Title III authority over wireless devices to ensure that devices are accessible to persons with disabilities. For example, the Commission requires that carriers ensure that 50 percent of all handsets sold meet Hearing Aid Compatibility regulations.¹⁰² Similarly, under Section 255 of the Communications Act,¹⁰³ carriers must

¹⁰⁰ WARN Act, Section 603. The WARN Act was enacted on October 11, 2006, as part of the Security Accountability for Every Port Act, Pub. L. No. 109-347, 120 Stat. 1936-1943 (2006).

¹⁰¹ The Commission has an extensive record in its own proceeding to consider changes to its emergency alert system that establishes how essential the close integration of wireless networks and devices will be to an effective alert system. *See, e.g.*, Notice of *Ex Parte* Presentation of Verizon Wireless, filed Aug. 10, 2006, WT Dkt. No. 04-296, *Review of the Emergency Alert System*.

¹⁰² *See* 47 C.F.R. § 20.19.

¹⁰³ 47 U.S.C. § 255.

ensure that all handsets be made accessible to persons with disabilities if “readily achievable.”¹⁰⁴

The Commission has used the Title III framework to implement a number of other important public interest policy goals. For example, the Commission requires carriers to ensure that radio frequency radiation exposure levels meet Subscriber Absorption Rate levels defined by the Commission as safe.¹⁰⁵ Carriers are required to support and allow for the portability of telephone numbers between carriers, and can implement LNP remotely to handsets because of the ways in which they have designed and programmed those devices.¹⁰⁶

Dissociating handsets from wireless networks would threaten the effectiveness of these programs. And, because compliance with these Commission regulations requires control at both the network and device level, dissociating handsets from wireless networks creates an environment in which *no one* entity can ensure compliance.

E. Grant of Skype’s Petition Would Impede Law Enforcement’s Ability to Engage in Lawful Surveillance.

Like all telecommunications carriers, wireless carriers are obligated to make available call identifying information (CII) and call content for all telecommunications (as that term is defined in CALEA) subject to subpoenas and lawful intercept.¹⁰⁷ The “open network” relief that Skype seeks would risk diminishing the ability of law enforcement authorities (LEAs) to

¹⁰⁴ See 47 C.F.R. § 6.1 *et seq.* (requiring “[a]ny provider of telecommunications service” and “any telecommunications carrier” to meet access obligations).

¹⁰⁵ See *id.* § 2.1091, 2.1093.

¹⁰⁶ See *id.* § 52.31.

¹⁰⁷ 47 U.S.C. § 1002(a).

conduct searches and isolation of certain call or session content provided over wireless networks.

The obligation of wireless carriers to comply with the requirements of **CALEA** extends to decryption or decoding of communications provided by the carrier and for which the carrier possesses the necessary information to decrypt the communication.¹⁰⁸ Verizon Wireless meets the requirements of **CALEA** with respect to encrypted information and telecommunications services by either providing **LEAs** with the software or “keys” to decrypt the information packets or by providing access to decryption services which may be controlled by third party software providers. Verizon Wireless is able to assist **LEAs** with gaining access to decryption software through its contractual relationships with its authorized software vendors. Thus, by controlling what software can be provided or used on the **CPE** of its subscribers, a wireless operator ensures the provision of vital decryption capabilities to **LEAs** to decode communications contained in packet mode services.

Under Skype’s regime, wireless carriers would be less able to control or ascertain what software is downloaded and used by subscribers to encrypt packet mode communications. Carriers would be unable to provide decryption services or ensure that **LEAs** have the capabilities to decode packet mode communications.

Another technical problem that wireless carriers would have in an open network is the inability to isolate certain types of packet mode communications and deliver them in a format that is compliant with the requirements of Section 103 of **CALEA**. For example, Verizon

¹⁰⁸ **48 U.S.C. § 1002(b)(3)** (“**Encryption** -- A telecommunications carrier shall not be responsible for any decrypting, or ensuring the government’s ability to decrypt, any communication encrypted by a subscriber or customer, unless the encryption was provided by the carrier and the carrier possesses the information necessary to decrypt the communication.”).

Wireless has worked with industry standards setting groups to develop standard CALEA compliance solutions for isolation of VoIP and Push-to-talk over Cellular (POC) packets delivered over a broadband CDMA network. These standards-based solutions would not be able to isolate VoIP or PoC applications streams provided by third parties in an open network environment. Therefore, the information may not be delivered to LEAs in an appropriate standard format.

Under the current regime, wireless operators contract with software providers to ensure that all of the telecommunications and information services are offered to subscribers are CALEA compliant, and can be decoded by LEAs with the wireless carrier's assistance. Enforcing Skype's "right to download" disrupts the existing system, and enables consumers to engage in communications protected by software in an uncontrolled environment for which CMRS carriers cannot ensure access decryption services to LEAs.

F. Skype's Regime Would Impair Consumers' Access to Wireless E911 and the Quality of Wireless E911.

An integral component of the Commission's efforts to implement wireless E911 was a requirement that network operators using a handset-based solution achieve a level of penetration of location-capable handsets among the subscribers to their respective networks.¹⁰⁹ At the time, the Commission assumed the carriers would be able to implement the required level of penetration through the sale and gradual deployment of location-capable handsets. Skype's regime would undercut this assumption.

¹⁰⁹ *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Third Report and Order, 14 FCC Rcd 17388, 17406-14 (1999).

In requiring wireless carriers to provide a 911 caller's location to Public Safety Answering Points ("PSAPs"),¹¹⁰ the Commission gave carriers the choice of a handset or network based technology solution.¹¹¹ Many carriers, including Verizon Wireless, chose the handset option. For those carriers, the Commission has relied on their ability to direct, to a great degree, consumer choice and the market for handsets in order to achieve near-ubiquitous availability and adoption of GPS-enabled handsets. The Commission's reliance on CMRS carriers to direct consumer choice and the handset market is apparent not only in the rule (47 C.F.R. 20.18), but also in several recent orders addressing carrier requests for additional time to convert the embedded base of non-GPS-enabled handset users to GPS-enabled handsets.

In contrast, if consumers can determine which handset to attach to a wireless carrier's network, as Skype proposes, carriers would lack the ability to validate the functionality of user-provided CPE or to otherwise block the use of non-compliant devices. Even if carriers were able to scan a user's handset for appropriate functions, the *post hoc* process to validate customer-provided CPE will not be as effective as the successful current process by which the carrier tests and approves the equipment for compatibility with its network *and* with the Commission's rules for mandates such as E911.

Skype's regime would undermine the Commission's E911 policies in other ways. For **any** device to make E911 calls on any wireless network, either the device would have to operate on every possible network standard, or all the networks would have to develop a single network standard for E911 (and other calls) that all manufacturers would use. (Skype appears to

¹¹⁰ See *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Report and Order, 11 FCC Rcd 18675 (1996); 47 C.F.R. § 20.18.

¹¹¹ See *Wireless E911 Third Report and Order*, 14 FCC Rcd at 17388.

propose the latter. *See Skype Petition*, at 30-32.) The multi-standard device would obviously be more expensive than today's phones because of the added electronics and software required, and inefficient: much of the embedded technology would be unused for most of the time (until the user switched networks).

On the other hand, Skype's proposed single network standard would require an enormous undertaking: agreement among many segments of the industry, a substantial outlay of funds, and substantial time for development and adoption of the standard, and then time for manufacturing and business cycles to make the phones available. Also, substantial time and cost to consumers would be required for replacement of over 200-300 million wireless devices in use when phones using the new single standard become available.

Even if one of these two solutions were adopted, a *Carterfone-like* requirement for wireless networks could not be achieved without also requiring manufacturers and network operators to limit innovation in the technology for delivery of wireless services, including E911 services, and use only the standard(s) available at a certain point in time (a la the current ~~Part~~ 68 standard). The Commission has already recognized that such restrictions on technology do not benefit consumers.¹²

Skype's proposal would also impair the quality of wireless E911 services. Currently, Verizon Wireless requires all handsets used on its network to meet technical standards that include standards for location-based E911 service. These standards reflect not **only** availability

¹² In the cable navigation device proceeding, the Commission was implementing Congress' mandated development of a universal set top box, but noted that "regulations [for technology standards] have the potential to stifle growth, innovation, and technical developments at a time when consumer demands, business plans, and technologies remain unknown." *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, 13 FCC Rcd 14775, 14781 (1998).

(95% penetration)¹¹³ but also quality (location accuracy standards).¹¹⁴ If the Commission were to impose a *Carterfone*-like requirement, as Skype requests, then Verizon Wireless would no longer have the capability to control the quality of E91 1 services to subscribers through their handsets. Worse, if wireless network operators cannot control what devices are used on the network, or what technical standards are used for the device's E91 1 capabilities, then they would not be able to ensure delivery of the 91 1 call, the accuracy of the location information, or the delivery of accurate call-back or account holder information to the same extent as under the current regime. These are serious threats to the wireless E91 1 system, which the Commission and carriers have worked for years to build.

The Commission could attempt to impose certain E91 1 standards on wireless CPE manufacturers, but the devices would still have to be built to the specifications of each individual network, unless the Commission imposed some kind of interoperability standard as discussed above. But, as in the ~~Part~~ 68 regime, the responsibility for ensuring distribution of location-capable handsets and location accuracy would shift primarily to the manufacturers and the Commission through its equipment marketing and import rules. While the Commission may be able to achieve the same quality of E91 1 services through such a regime, it would require a substantial change to the rules and enforcement mechanisms that are currently in place. Skype has not demonstrated that such a change would benefit consumers.

Skype relies on the model of the European market to argue in favor of its proposals for wireless services in the United States. *Skype* Petition, at 17. For wireless E91 1, there is simply no comparison. The development of emergency services in the United States is significantly

¹¹³ 47 C.F.R. § 20.18(g).

¹¹⁴ 47 C.F.R. § 20.18(h).

more advanced than in Europe. Only seven of the 25 European Union states have implemented the handling of location information for mobile emergency calls (“112” service).¹¹⁵ Moreover, in contrast to the United States, the European mandate to provide the location of mobile users for emergency calls did not specify precise accuracy, and only some mobile operators have deployed capabilities in their networks and devices.’¹⁶

The European Community mandated a GSM standard for all mobile devices, and so, as Skype notes, there is greater interoperability among networks in Europe, and handset manufacturers are providing location-capable phones in the European market. In theory, this is the model that Skype suggests would benefit U.S. consumers. But, what worked in the United States was a mandate imposed upon carriers who worked directly with manufacturers to develop the capabilities that are placed on handsets, and who approve all devices for activation on their networks. Adopting Skype’s proposals would vitiate this model and its effectiveness for bring socially beneficial services to consumers.

The Commission’s experience with 911 service for some VoIP customers shows the complications that result when responsibility for compliance is not expressly imposed on the provider or is otherwise left unclear. Dissociating handsets from wireless networks would result in similar problems, particularly if users bring handsets onto the wireless networks that are not compliant with E911 or other Commission requirements. The existing carrier accountability model avoids this problem entirely by having carriers ensure that devices on their

¹¹⁵ Commission of the European Communities, “Bringing eCall back on track – Action Plan,” at 5 (Nov. 23, 2006).

¹¹⁶ Gartner Dataquest, “Forecast: GPS in Mobile Devices, Worldwide, 2004-2010,” at 7 (Nov. 29, 2006).

networks are compliant with applicable Commission rules. Skype's Petition is noticeably silent about who would fill this regulatory void under its proposed regulatory regime.

G. A Common Standard for Wireless Would Diminish the Reliability and Accessibility of Wireless Networks And Disserve Consumers.

To implement its proposals, Skype requests that the Commission initiate a proceeding that would develop a common standard for wireless networks. *Skype Petition*, at 30-32. But the Commission has already rejected this "Part 68" approach for wireless networks, because it would stifle innovation by network operators and harm consumers. It found that "a greater range of technical and service options in the cellular service is in the public interest."¹¹⁷ It made a policy decision that relying on the marketplace was the best way to ensure consumers have access to desired and innovative services. The Commission recently reiterated that its policy choice has served consumers well.¹¹⁸

Moreover, the Commission's decision not to pursue a single technical standard for digital cellular services was not an isolated incident based on untested faith in the marketplace. It has taken similar steps in many contexts. For example, the Commission eliminated technical standards for FM Stereo based on precisely the same "belief that the marketplace provides the necessary incentives for broadcasters to deliver signals of sufficient technical quality."¹¹⁹ The Commission even rejected a request that new standards be universally compatible with the

¹¹⁷ *Amendment of Parts 2 and 25 of the Commission's Rules to Permit Liberalization of Technology and Auxiliary Service Offerings in the Domestic Public Cellular Radio Telecommunication Service*, 3 FCC Rcd 7033, 7034 (1988) ("Cellular Radio Technology").

¹¹⁸ *Eleventh Competition Report*, ¶¶ 102-103.

¹¹⁹ *Review of Technical and Operational Regulations of Part 73, Subparts B, C, and H, FM Broadcast Stations*, 60 Rad. Reg. 2d 374, ¶ 3 (1986) ("FM Stereo"); see also *Review of Technical and Operational Requirements of Part 73, Subpart A, AM Broadcast Stations*, 59 Rad. Reg. 2d 927, ¶ 3 (1986).

standard in the Commission's rules because "this action would be tantamount to retention of our current rules, which limit marketplace research and development of new technology. Further, we would prefer the marketplace, and not government standards, determine the success or failure of new technology, *especially in a competitive industry* such as FM broadcasting."¹²⁰

The Commission took a similar policy stance with respect to broadband networks. In the *Wireline Broadband Classification Order*,¹²¹ the Commission refused to extend its *Computer Inquiry* requirements to broadband services, based in **part** on the harm to consumers that would result from doing so: "the inability to customize broadband service offerings . . . impedes deployment of innovative wireline broadband services taking into account technological advances and consumer demand."¹²² Moreover, this requirement would "perpetuate wireline broadband Internet access providers' inability to make better use of the latest integrated broadband equipment and would deprive customers of more efficient and innovative enhanced services." In short, the Commission found that consumers are best served by an unregulated broadband market, because that regime promotes investment and innovation.

Skype's request amounts to development of a common network interface installed in all wireless data networks that would accommodate any imagined application now in existence or developed in the future. The Commission's settled policies against this regime are correct because Skype's proposals would have numerous and obvious detriments for consumers.

¹²⁰ *FM Stereo*, 60 Rad. Reg. 2d 927, ¶ 5.

¹²¹ *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, 20 FCC Rcd 14853 (2005).

¹²² *Id.* at 14905.

¹²³ *Id.*

First, given the technical diversity in use in today's wireless data networks, which Skype recognizes (*Petition*, at 16n.28), Skype is vague on whether it would accomplish this request by mandating that all wireless broadband networks conform to one set of technical standards for all software applications, or by mandating that they incorporate at least two standards, one individual, one common, to ensure no matter how the software was developed, that it would run on the network of the user's choosing, barring "harm to the network." But, by mandating use of a common standard for all networks, consumers would lose the benefits of technology competition and price competition resulting from technology diversity, which the Commission just recently explained in the *Eleventh Competition Report*.¹²⁴

Second, assuming there were some rational reason to promote common wireless standard, there remains the issue of heterogeneous broadband platforms. Some software applications are developed to run on several distinct broadband platforms, not just wireless platforms. But, not all broadband platforms are created equal: There are enormous difficulties in adjusting applications to run on the small screen of mobile and portable devices, plus there are many other challenges for mobile devices that are not present in other broadband platforms, e.g., power limits and battery limits.¹²⁵ So, inevitably there would be multiple standards depending upon the type of broadband platform. Skype has not pointed to any market evidence of demand for a common wireless standard that would justify developing such a standard. In

¹²⁴ *Eleventh Competition Report*, ¶¶ 102-103; cf. Hazlett Statement, at 4-5 (open access rule would deprive consumers of "their opportunity to realize the efficiencies of handsets delivering a given technology"); Higgins Statement, at 17-19 (discussing cost and complexity of adding additional air interfaces to device).

¹²⁵ See Higgins Statement, at 18-19; Lowenstein Statement, at 11.

the current market for broadband platforms, technology diversity and differentiation are pervasive, and that has benefited, not harmed, consumers.

Third, even if a common wireless broadband standard were developed, it would not guarantee that every application could run on every wireless broadband network. Unlike the near universal standards deployed in the wireline PSTN, wireless network providers are under no obligation to devote the same amount of resources, spectrum or otherwise, to their data networks as every other data network, nor are they required to offer the same sized handsets, the same battery pack or any other feature that might affect the ability of a consumer to run the application of his or her choice. Thus, to the extent that networks vary in resources devoted to broadband services and configurations of those services, the application may or may not run, or may run with substantial differences. Providing a high quality user experience under these circumstances would be difficult.¹²⁶ Presumably, an application could identify for consumers the network requirements for satisfactory operation, and consumers could match the application with the network. But, unless the Commission mandated that every wireless network would have to operate with the same spectrum resources, the same technology, the same configuration, and the same devices, a common technical standard would serve no purpose.

Fourth, even if an application can be run on a wireless network, that does not mean that it *should* be allowed to run on a wireless network. As noted above, some applications can essentially occupy the entire available bandwidth resource of wireless networks, precluding other consumers from exercising their “right” to run any application of their choice of the network, or to simply to check their email. Facilities-based wireless carriers, as spectrum holders, have a public interest obligation to serve the public and their subscribers. Creating an

¹²⁶ See Lowenstein Statement, at 11-12.

expectation in consumers that every software application will run on a wireless network is a concept totally divorced from the reality of wireless network operations. Skype's effort to dictate uniformity is unable to dictate the ultimate goal: usability. Consumers will be disappointed as the "expectations" for universal usability from a common standard clash with the reality of engineering a wireless network.¹²⁷ Skype's proposal for a common wireless standard fails on every score, from the Commission's existing competition policies, to the workings of the wireless marketplace, to the practical issues of whether it would actually work and provide any benefit to consumers.

IV. *CARTERFONE* PROVIDES NO BASIS FOR REGULATING THE WIRELESS INDUSTRY.

Skype's entire Petition is premised on the assumption that the Commission's 1968 *Carterfone* decision provides an appropriate regulatory regime for wireless. Skype is flat out wrong. Neither the market failure *Carterfone* addressed, nor the solutions it imposed, have any relevance to the wireless sector. Because Skype's Petition is built on a false premise that ignores subsequent Commission decisions and the radical differences between the 1968 landline telephone market and the 2007 wireless industry, it must be denied.

A. *Carterfone* Was a Response to a Monopoly That Bears No Resemblance To Today's Robustly Competitive CMRS Market.

At the time of the Commission's *Carterfone* decision, the Bell System controlled all aspects of telephone service, providing customers with not only the wires and switches in the

¹²⁷ See *AT&T v. FCC*, 836 F.2d 1386, 1390-92 (D.C. Cir. 1988) (agency standard that undermines rather than promotes policy goals cannot stand).

network but also CPE and inside wiring.¹²⁸ *Carterfone* represented the Commission's effort to reduce control by the Bell System by promoting competition in the CPE market.¹²⁹

At issue in *Carterfone* was the so-called "foreign attachment" provision in AT&T's tariff that prohibited any non-AT&T product from being interconnected with AT&T's network.¹³⁰ This provision was challenged by Thomas Carter, the manufacturer of the "Carterfone," which was a device that permitted the person receiving an incoming telephone call to transmit the call to another location using a mobile radio. Carter filed a private antitrust action against AT&T after it advised subscribers that the Carterfone, when used in conjunction with the subscriber's telephone, violated the "foreign attachment" provision of AT&T's tariff and would subject the customer to penalties provided in the tariff.¹³¹

Upon referral by the court of the issues relating to AT&T's tariff, the Commission invalidated the "foreign attachment" language, holding that subscribers had the right to attach any Customer Premises Equipment (CPE) to the wireline network "so long as the

¹²⁸ See Peter W. Huber, Michael K. Kellogg & John Thorne, *Federal Telecommunications Law* § 8.4.1.1 (2d ed. 1999).

¹²⁹ *Carterfone* was an outgrowth of the Commission's decision in *Hush-A-Phone Corporation and Harry C. Tuttle v. American Tel. & Tel. Co.*, Decision and Order on Remand, 22 FCC 112, 114 (1957), in which the Commission directed AT&T to permit its customers to use the Hush-A-Phone, which was a cup-like device that snapped onto the mouthpiece of the telephone to reduce noise and increase privacy. The Commission, after its prior decision was reversed by the D.C. Circuit, rejected AT&T's arguments that the device would adversely affect telephone service and held that future AT&T tariffs must not encroach "upon the right of the user to make reasonable use of facilities furnished by the defendants" and must distinguish "between the harmful and harmless." *Id.* at 113.

¹³⁰ The tariff provision in question stated that "[n]o equipment, apparatus, circuit or device not furnished by the telephone company shall be attached to or connected with the facilities furnished by the telephone company, whether physically, by induction or otherwise." *Use of the Carterfone Device in Message Toll Telephone Service*, 13 FCC 2d 420, 421 (1968) ("*Carterfone*"), *recon.*, 14 FCC 2d 571 (1968).

¹³¹ *Carter v. American Tel. & Tel.*, 250 F. Supp. 188, 190 (N.D. Tex. 1966), *aff'd*, 365 F.2d 486 (5th Cir. 1966).

interconnection does not adversely affect the telephone company's operations or the telephone system's utility for others."¹³² The Commission concluded that the tariff provision was unreasonable and unduly discriminatory in violation of sections 201(b) and 202(a) by prohibiting "the use of harmless as well as harmful devices" and by approving "the telephone company's own interconnecting equipment."¹³³

The Commission subsequently continued its efforts to promote competition in the CPE market, extending *Carterfone* to "interconnected devices such as PBXs and key systems which may replace telephone system equipment,"¹³⁴ and adopting Part 68 of its rules, which established a telephone equipment registration program to ensure the technical feasibility of its competitive CPE policy.¹³⁵ *Carterfone* eventually spawned the Commission's *Computer*

¹³² *Carterfone*, 13 FCC 2d at 423-24.

¹³³ *Id.* at 424.

¹³⁴ *American Tel. & Tel. Co.'s Proposed Tariff Revisions in Tariff F.C.C. No. 263 Exempting Mebane Home Tel. Co.*, Memorandum Opinion and Order, 53 FCC 2d 743, ¶ 7 (1975), *aff'd sub. nom. Mebane Home Tel. Co. v. FCC*, 535 F.2d 1234 (D.C. Cir. 1976).

¹³⁵ 47 C.F.R. § 68.1, *et seq.*; see *Proposals for New or Revised Classes of Interstate and Foreign Message Toll Telephone Service*, First Report and Order, 56 FCC 2d 593 (1975), *modified*, 58 FCC 2d 736 (1976), *aff'd sub. nom. North Carolina Utilities Comm'n v. FCC*, 552 F.2d 1036 (4th Cir. 1977). The Part 68 program was designed to promote competition by establishing technical standards to govern the interconnection of CPE to the network and thereby protect the integrity of the network without relying upon restrictive tariff provisions to do so. Part 68 also prevented discrimination by requiring that customer-provided and carrier-provided CPE connect in the same manner to carrier facilities.

Inquiry proceedings,¹³⁶ which continued the Commission's policy of promoting competition in the CPE market.¹³⁷

In short, *Carterfone* and its progeny involved concerns stemming from the existence of a vertically integrated monopoly (*i.e.*, AT&T and Western Electric) seeking to protect its market power in adjacent markets (*i.e.*, CPE and information services) to the potential detriment of consumers. The Commission reasoned that these competitive harms would best be addressed by allowing customers to interconnect non-harmful devices to the wireline network, which would: (1) reduce CPE prices by allowing other competitors to offer competing terminal equipment; (2) promote innovation by encouraging competitors to provide customers with more than the black rotary telephone offered by AT&T and Western Electric; and (3) benefit the public by increasing customer choice.¹³⁸

Skype's desire to extend the regulatory solution to the problem identified in *Carterfone* to the wireless sector ignores the dramatic competitive differences between that sector and the

¹³⁶ *Amendment of Section 64.702 of the Commission's Rules and Regulations* (Second Computer Inquiry), Final Decision, 77 FCC 2d 384 ¶ 141 (hereinafter *Computer II*), modified by Memorandum Opinion and Order, 84 FCC 2d 50 (1980), *aff'd*, 88 FCC 2d 512 (1981), *aff'd*, *Computer & Comm. Industrial Ass'n. v. FCC*, 693 F.2d 198 (D.C. Cir. 1982).

¹³⁷ See generally Robert Cannon, *The Legacy of the Federal Communications Commission's Computer Inquiries*, 55 Fed. Comm. L. J. 167 (2003); *Computer I*, 77 FCC 2d at 439 ¶ 141 (citations omitted).

¹³⁸ See *American Tel. & Tel. Co.'s Proposed Tariff Revisions in Tariff F.C.C. No. 263 Exempting Mebane Home Tel. Co.*, Memorandum Opinion and Order, 53 FCC 2d at 743, ¶ 7 (noting the "substantial private benefit" to customers resulting from the decision allowing the interconnection of non-harmful CPE to AT&T's network); *Computer II*, 77 FCC 2d at 439 ¶ 141 (noting that its policy of isolating terminal equipment from transmission offerings "stimulated innovation on the part of both independent suppliers and telephone companies, thereby affording the public a wider range of terminal choices at lower costs") (citations omitted).

wireline world that existed in 1968. The problems *Carterfone* was intended to address simply do not exist in the wireless sector, making that precedent inapposite and irrelevant.

First, the wireless industry is not dominated by a monopoly provider as was the case with AT&T in the wireline market in 1968. The statistics included in Part II of these comments, drawn largely from the Commission's own findings, show that the wireless industry is robustly competitive.

Second, unlike with AT&T in 1968, wireless carriers are not engaged in the manufacture of wireless handsets, and the handset manufacturing sector is vigorously competitive. For example, according to the Experimental Licensing database maintained by the Office of Engineering and Technology, *the Commission received 623 applications for wireless handset devices in the two-year period from April 2, 2005 through April 2, 2007, and these 623 applications were submitted by 75 different manufacturers.* The competitive concern that led to *Carterfone* – that AT&T, through its manufacturing arm, was stifling competition in the CPE market – is not present in the wireless sector. Unlike manufacturers of the *Carterfone* and other wireline CPE seeking to compete against AT&T and Western Electric, handset manufacturers do not require government intervention in order to compete or innovate.

Third, in addition to these fundamental competitive differences, wireless customers already enjoy the benefits that *Carterfone* sought to bring to wireline customers. The policy objectives underlying *Carterfone* -- to stimulate innovation in the wireline CPE market and increase customer choice of terminal equipment at lower cost -- have already been achieved for wireless.¹³⁹

¹³⁹ See Hazlett Statement, at 8-11 (explaining why a *Carterfone* solution is not needed for the competitive wireless industry); see discussion of device competition in Part 11, above.

The fact that wireless customers currently have the opportunity to purchase innovative handsets, enjoy numerous handset options, and obtain handsets at little or no cost readily distinguishes the wireless market from the wireline CPE market confronting the Commission in *Carterfone*. Competition in the wireless industry brings substantial benefits to consumers, of exactly the type that the Commission wanted to bring to the wireline market of the 1960s. That fact obviates any basis for the Commission to consider regulating the industry by initiating a rulemaking concerning *Carterfone*-like requirements.

B. The Commission Has Already Rejected *Carterfone's* Concept of a Single Access Standard for Wireless.

The Commission has already addressed the need for the regulatory regime requested by Skype and rejected it. At the dawn of cellular service, the Commission had adopted a similar, single compatibility standard for analog cellular systems so “that any cellular mobile telephone is able to place and receive calls in any cellular system; and conversely, all systems are able to place and receive calls for any mobile telephone.”¹⁴⁰ However, when presented with the prospect of adopting a similar technical standard for digital wireless systems, the Commission rejected the proposal, deciding that consumers would benefit from technology diversity:

Cellular service has undergone a rapid and highly successful development. This service has in its early stages been governed by detailed technical and compatibility standards. While these standards have served a useful purpose in providing a stable environment for the initial growth of this service, these same standards may now stand as an impediment to the development of a more spectrum-efficient service capable of accommodating the millions of additional cellular subscribers anticipated in the future. . . . Therefore, based on the record developed in this

¹⁴⁰ Cellular Radio Technology, 3 FCC Rcd at 7038.

proceeding, we conclude that a greater range of technical and service options in the cellular service is in the public interest.¹⁴¹

The Commission recognized that there was a need for minimal standards to govern interference and marketing of equipment consistent with the technical standards in use by network operations. Otherwise, the Commission observed that “in a competitive market, such as exists in the provision of mobile communications services, market forces compel service providers to offer the quality and quantity of products sought by consumers.”¹⁴² It thus determined to rely on the marketplace to ensure consumers have access to desired and innovative services, and its policy proved to be correct.

Moreover, the Commission relied on the wireless sector to develop standards that would maximize benefits to operators and consumers. Although industry groups were setting multiple standards for wireless networks, the Commission decided that no compatibility standards were needed for future systems. “We believe it would be premature for the Commission to intervene in the standards setting process. Industry is in a better position to evaluate the technical advantages and disadvantages of the various advanced cellular technologies and develop approaches to compatibility.”¹⁴³ As just one problem with mandated compatibility standards, the Commission found any rigid standard would be outpaced by developments in technology. “[T]he rate of change in digital techniques appears to be so great as to limit severely the value of” a compatibility proceeding.¹⁴⁴ The constant evolution of technology belies the utility of any snapshot-in-time standard such as Skype proposes.

¹⁴¹ *Id.* at 7034.

¹⁴² *Id.* at 7037-38.

¹⁴³ *Id.* at 7040.

¹⁴⁴ *Id.*

The Commission's decision to forego mandated compatibility standards for wireless networks has resulted in an explosion of competitive wireless services, products and pricing, *as the Commission itself has factually found repeatedly on an annual basis.*¹⁴⁵ To the extent there is a demand for compatibility, wireless networks have developed compatibility. For example, in the United States, GSM and CDMA carriers have developed standards that allow text messages to be delivered to each other's subscribers.¹⁴⁶ The popularity of this application among subscribers made it compelling for carriers to respond and provide interoperability.

The Commission's faith in the wireless marketplace to drive technological changes to benefit consumers remains correct today: "[I]n a competitive market, such as exists in the provision of mobile communications services, market forces compel service providers to offer the quality and quantity of products sought by consumers."¹⁴⁷ Indeed, within the past year, the Commission reiterated this finding:

[T]he Commission's policies allow mobile telecommunications carriers the freedom to choose among the various standards for second-generation and more advanced network technologies Thanks to the flexibility afforded by the Commission's market-based approach, different U.S. carriers have chosen a variety of different technologies and associated technology migration paths, and competition among multiple incompatible standards has emerged as an important dimension of non-price rivalry in the U.S. mobile telecommunications market and a distinctive feature of the U.S. mobile industry model.¹⁴⁸

¹⁴⁵ See, e.g., *Eleventh Competition Report*, ¶ 2; *Tenth Competition Report*, 20 FCC Rcd 10947, 10950 (2006); *Ninth Competition Report*, 19 FCC Rcd 20597, 20600 (2005).

¹⁴⁶ See, e.g., "GSM and CDMA MMS interoperability report announced," Mobile Tech News (May 7, 2004), <http://mobiletechnews.com/info/2004/05/07/105706.html>, last visited Mar. 28, 2007.

¹⁴⁷ *Cellular Radio Technology*, 3 FCC Rcd at 7038.

¹⁴⁸ *Eleventh Competition Report*, ¶ 102.

Encouraging technology diversity has proven a boon to wireless consumers. The Commission should reject Skype's call for a giant leap backward, and decline to open a proceeding to mandate common operational standard for all wireless networks.¹⁴⁹

C. The Commission Rejected *Carterfone*-Like Requirements in Its 1992 Cellular Bundling Order.

Skype urges the Commission to revisit its 1992 decision finding that the bundling of wireless services and handsets is reasonable and in the public interest, provided that “cellular service is also offered separately on a nondiscriminatory basis.”¹⁵⁰ The Commission should decline to do so. As discussed above, competition in the wireless marketplace has increased substantially in the 15 years since the Commission's *CPE Bundling Order*, and the same public interest benefits of bundling wireless service and handsets that the Commission identified in 1992 – increased wireless subscribership due to the provision of discounted handsets and efficient utilization of spectrum – remain equally true today.

Skype argues that the “characteristics” of the wireless sector have changed since 1992, wrongly insisting that the wireless marketplace is “highly concentrated” with a “smaller number of carriers.” *Skype Petition*, at 21. In fact, as demonstrated above, the wireless market is effectively and robustly competitive today, even more so than in 1992 when the Commission's rules allowed no more than two facilities-based wireless carriers in a market.

¹⁴⁹ See, e.g., *Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 852 (D.C. Cir. 1970), *cert. denied*, 403 U.S. 923 (1971) (“an agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored”).

¹⁵⁰ *Bundling of Cellular Customer Premises Equipment and Cellular Service*, 7 FCC Rcd 4028, 4028-29 (1992) (“*Cellular CPE Bundling Order*”).

The *dicta* from the *CPE Bundling Order* suggesting a requirement to support any device a customer owns comes from a duopoly era in which cellular operators used a common air interface – AMPS – and were subject to other regulations that the Commission removed in the wake of competition.¹⁵¹ Moreover, interference issues associated with certain wireless devices can degrade the quality of communications or prevent communications entirely. Verizon Wireless would be unable to offer the same network reliability to customers,¹⁵² if it had no ability to determine the quantity or type of devices its network will support.¹⁵³

While seeking to undo the Commission’s cellular bundling policy in the guise of promoting a consumer’s “right to attach” any device to the network, Skype makes little mention of the public interest benefits flowing from the current policy, which the Commission identified in its 1992 *CPE Bundling Order*. The Commission permitted the bundling of handsets and cellular service even absent a competitive wireless industry, because of the “significant public

¹⁵¹ Like parties urging the Commission to retain, based on the *Hush-a-Phone* decision, resale obligations that sunset with competition in the wireless industry, Skype confuses the means with the ends. See *Cellnet Communications, Inc. v. FCC*, 149 F.3d 429, 437 (6th Cir. 1998) (rejecting arguments that *Hush-a-Phone* required continued application of a resale policy designed to promote CMRS competition despite the existence of competition in the CMRS market). Where both the CMRS and wireless device markets are competitive, Skype’s request to resurrect a policy designed to promote such competition is misplaced.

¹⁵² See Higgins Statement, at 22-23 (describing the importance of managing devices on a network in order to ensure that the shared spectrum is used efficiently).

¹⁵³ Consistent with the Commission’s *Cellular CPE Bundling Order*, 7 FCC Rcd at 4029, Verizon Wireless must make available cellular service separately at a nondiscriminatory price, which Verizon Wireless does. If a subscriber believes that a carrier is engaged in a practice that runs afoul of this requirement, the appropriate course of action would be for the subscriber to file a complaint, which would allow the Commission to consider the merits of the complaint and order appropriate remedies against the offending carrier, if any. However, Skype’s request that the Commission unilaterally prohibit all wireless carriers from bundling handsets and cellular service is unwarranted.

interest benefits” associated with such bundling.¹⁵⁴ Specifically, according to the Commission, the bundling of handsets and cellular service: (1) is “an efficient promotional device which reduces barriers to new customers and which can provide new customers with CPE and cellular service more economically than if it were prohibited”; and (2) promotes the efficient use of spectrum by spreading the fixed cost of providing cellular service “over a larger population of users, achieving economies of scale and lowering the cost of providing service to each subscriber.”¹⁵⁵

Today, the wireless market is far more competitive, and these same public interest benefits resulting from the Commission’s bundling policy are even more compelling today than they were 15 years ago.¹⁵⁶ There is no basis for the Commission to revisit that settled policy.

D. The Commission Also Rejected Applying *Carterfone* To Cellular Service.

Skype claims that unbundling is legally required by Sections 201(b) and 202(a) of the Communications Act. *Skype Petition*, at 25-27. But, the Commission has rejected similar calls to impose the principles set forth in *Hush-A-Phone* and *Carterfone*, espoused now by Skype, to impose third-party rights to use wireless networks. In so doing, the Commission has firmly rejected the idea that such obligations are inherent in Section 201(b) and 202(a). That decision was and remains correct and compels denial of Skype’s petition.

Over 10 years ago, in deciding to sunset the cellular resale rule, the Commission decided that competition in CMRS markets obviated the need for imposing *Hush-A-Phone* or

¹⁵⁴ *Cellular CPE Bundling Order*, 7 FCC Rcd at 4030-31.

¹⁵⁵ *Id.*

¹⁵⁶ Hazlett Statement, § II (discussing importance of bundling in offering cost-effective products and meeting consumers’ demands).

Carterfone-like principles. It found that “the competitive development of broadband PCS service will obviate the need for a resale rule in the cellular and broadband PCS market sector.”¹⁵⁷

Cellnet Communications, Inc., appealed adoption of the sunset rule, arguing that, as decided in *Hush-A-Phone* and *Carterfone*, Sections 201(b) and 202(a) entitled carriers “as a matter of law to use the services of CMRS licensees for any ‘privately beneficial’ purpose unless such use is demonstrated to result in ‘public detriment.’”¹⁵⁸ The Commission argued in response, and the U.S. Court of Appeals for the Sixth Circuit agreed, that Sections 201(b) and 202(a) incorporated no such right, and that the standard to be applied to carrier practices remained the just and reasonable test in Sections 201 and 202, which could vary depending on the status of the relevant markets. As the court stated:

We agree with the FCC that Cellnet’s arguments are meritless. We reject the notion that the *Hush-A-Phone* decision set out a “public detriment/private benefit” test for FCC action. . . . The justness and reasonableness requirements set out in §§ 201 and 202 remain the criteria for FCC action. Thus, the *Hush-A-Phone* decision neither set forth other, more restrictive principles, nor did it recognize the existence of a customer’s right to resell services as long as such was not publicly detrimental.¹⁵⁹

The Commission’s decision to sunset the resale rule was properly guided by its “policy goal of opening up monopoly and duopoly markets to competition.”¹⁶⁰ There simply was no inherent

¹⁵⁷ *Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services*, 11 FCC Rcd 18455, 18468 (1996) (repealing 47 C.F.R. § 20.12(b)), *aff’d sub nom.*, *Cellnet Communications, Inc. v. FCC*, 149 F.3d 429 (6th Cir. 1998).

¹⁵⁸ *Cellnet Communications, Inc. v. FCC*, 149 F.3d 429, 436 (6th Cir. 1998).

¹⁵⁹ *Id.*; see also *Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services*, 14 FCC Rcd 16340, 16349 (1999) (rejecting Cellnet’s arguments for application of *Hush-A-Phone* on reconsideration of the resale sunset rule).

¹⁶⁰ *Cellnet Communications v. FCC*, 149 F.3d at 437.

right to use other carriers' networks even under Sections 201 and 202. The principle applies to today's competitive wireless industry, leaving no room for application of the rationale underlying Skype's proposals.

E. *Carterfone* Cannot Apply To Wireless Broadband Internet Access Services.

Although at times unclear from Skype's petition, this proceeding involves considerably more than *Carterfone* and the bundling of handsets and cellular service. Rather, Skype seeks to promote its own business by having the Commission adopt Title 11-based rules for wireless broadband services – a request that is plainly inconsistent with the Commission's desire to subject such services to minimal regulation by removing them from Title 11.

In its recent *Wireless Broadband Internet Access Order*, the Commission held that “wireless broadband Internet access service, whether offered using mobile, portable, or fixed technologies, is an ‘information service’ under the Communications Act.”¹⁶¹ The Commission concluded that this classification was consistent with its findings that broadband Internet access service provided over cable system facilities, wireline facilities, and broadband over power line facilities constituted “information services.”¹⁶² The Commission also was persuaded that the classification of wireless broadband Internet access service as an “information service” would promote broadband deployment, particularly “in rural and underserved areas, where wireless broadband may be the most efficient broadband option.”¹⁶³ The Commission's *Wireless*

¹⁶¹ *Wireless Broadband Internet Access Order*, ¶ 22.

¹⁶² *Id.*, ¶¶ 25-26.

¹⁶³ *Id.*, ¶ 27. The Commission's decision not to regulate this service under Title 11 is consistent with Section 706 of the Telecommunications Act, in which Congress mandated the Commission to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans in a manner consistent with . . . regulatory

Broadband Internet Access Order is fatal to Skype's request to extend *Carterfone* to wireless broadband Internet access services and subject such services to regulation under Sections 201 and 202 of the Communications Act. See *Skype Petition*, at 26.

Although Skype complains about terms of service limitations for certain wireless broadband services and an alleged lack of open development platforms for wireless broadband applications, such complaints ring hollow. *Skype Petition*, at 18-19. The robustness of any wireless broadband service is constrained by the spectrum available to support such services. The "last mile" of a wireless network is a shared resource rather than a dedicated connection. Thus, large capacity users can consume a disproportionate share of the available spectrum, which results in the degrading or blocking access of other users in the same area.¹⁶⁴ High-capacity uses like peer-to-peer file sharing or movie downloading require much more capacity and require continuous streams of data usage, which can degrade the performance for other users on the network.¹⁶⁵

Therefore, carriers must, by necessity, impose some level of management on the applications that run on their networks to avoid a "tragedy of the commons" scenario with regard to last-mile wireless communications.¹⁶⁶ The capacity of cell sites is limited, and heavy users of wireless broadband services tax the cell backhaul connections. Verizon Wireless would be unable to offer a high quality wireless broadband experience for all of its customers if

forbearance, . . . or other regulatory methods that remove barriers to infrastructure investment." Telecommunications Act of 1996, Pub. L. 104-104, 110 Stat. 56 (1996) (47 U.S.C. § 157 note).

¹⁶⁴ Higgins Statement, at 23.

¹⁶⁵ *Id.*

¹⁶⁶ *Cf.* Marguerite Reardon, *Tight Squeeze for Mobile TV*, CNET News.com (June 13, 2006) (noting that streaming video consumes ten times the bandwidth on a 3G network as voice traffic consumes).

it were powerless to manage heavy users, as Skype proposes. Indeed, if all users were allowed unrestrained, and thus unpredictable, access, few users would find the resulting experience worth the price of subscription.¹⁶⁷

In addition, the development of broadband applications for wireless devices is not comparable to the development of applications on the Internet generally. In addition to general network security concerns, wireless handsets are constrained by battery and memory limitations, and Verizon Wireless must ensure that applications supported by the devices it offers meet customer expectations as well as satisfy applicable legal requirements. Skype's request that the Commission establish "technical standards" for the development environment for wireless broadband applications goes well beyond *Curterfone* and is both inappropriate and unnecessary.

Skype's suggestion that wireless carriers are frustrating innovation by undermining the "end-to-end" principle that guided the development of the Internet has no basis and is false. *Skype Petition*, at 12. First, Skype's Petition is devoid of any reference to a specific wireless broadband application demanded by customers, the development of which has not occurred because of wireless carriers. Indeed, if customers have a keen interest in the ability to run a particular broadband application on their wireless devices, wireless carriers have ample incentive to make it available, given the numerous other competitive options that customers have. Second, Skype seriously overstates the alleged "control" that wireless carriers exert over the development of broadband applications. Carriers and application providers work cooperatively in developing applications that can be supported on wireless broadband networks,

¹⁶⁷ Higgins Statement, at 20.

which is not surprising given the unique issues associated with utilizing such applications by means of a handheld device (*e.g.*, cost, size, memory, and battery life).¹⁶⁸

F. The Use of *Carterfone*-Like Rules for Cable Navigation Devices Does Not Support Skype's Request.

Skype points to the Commission's application of the *Carterfone* principle to multichannel video programming (MVP) navigation devices as analogous to the "positive effects" similar rules would have on the commercial wireless services markets. *Skype Petition*, at 11. But, the analogy is inapposite. The Commission's navigation device rules are not appropriate and the market conditions that they addressed are radically different.

As part of the Telecommunications Act of 1996, Congress directed the Commission to adopt rules that would ensure that consumers had commercial availability to equipment "used to access multichannel video programming and other services offered over multichannel video programming systems, from manufacturers, retailers and other vendors not affiliated with any multichannel video programming distributor."¹⁶⁹ As the Commission noted, the parallel to AT&T and the *Carterfone* decision was striking: MVP subscribers generally leased navigation

¹⁶⁸ See *id.*, at 2-3. Confusingly, Skype itself asks that the Commission conduct a separate "Notice of Inquiry" into its requests. *Skype Petition*, at 30. Such duplicative proceedings would merely end up wasting scarce Commission resources. See *Broadband Industry Practices*, Notice of Inquiry, WC Docket No. 07-52 (April 16, 2007). Similarly, issues regarding the Commission's *Broadband Policy Statement*, see *Skype Petition*, at 27, are more appropriately raised in Commission's existing Notice of Inquiry on *Broadband Industry Practices*, rather than a separate proceeding on Skype's proposals.

¹⁶⁹ 47 U.S.C. § 549(a).

equipment from their MVP distributor, and no marketplace existed for consumers who wanted to purchase navigation devices for attachment to the MVP system.¹⁷⁰

To implement Congress' mandate, the Commission required MVP systems to separate the security/system access functions of the subscriber device, which remained CPE proprietary to the MVP system, from the other more universal channel navigation functions, which could be manufactured and sold by any manufacturer or vendor to consumers.¹⁷¹ The Commission set a hard date for a ban on MVP distributors leasing or selling a consumer device that integrated both the security/access and signal navigation functions.¹⁷²

Section 629 and the market for MVP navigation devices since 1996 illustrate why the MVP device market should be distinguished from the market for wireless devices and services, and demonstrate why application of the *Carterfone* principle to the latter is inappropriate. Like the monopoly AT&T of the 1960s, the MVP industry in the 1990s consisted primarily of monopoly cable providers, where subscriber choice was frequently limited to a single cable operator in a franchise area, and competitive (satellite) MVP systems were just beginning service. In contrast, as explained above, the wireless service and CPE industry is fiercely competitive, and has been for the past 15 years. In short, the underlying policy objective of applying the *Carterfone* principle to MVP navigation devices -- promoting competition in the end-user device market -- has already been achieved for the wireless industry. Indeed, the

¹⁷⁰ *Implementation of Section 304 of the Telecommunications Act of 1996*, 13 FCC Rcd 14775, 14780 (1998) ("MVP Navigation Device Order"), on recon., 14 FCC Rcd 7556 (1999), pet. for rev. denied, *General Instr. Corp. v. FCC*, 213 F.3d 724 (D.C. Cir. 2000).

¹⁷¹ *Id.* at 14793-94.

¹⁷² *Id.* at 14793; see 47 C.F.R. § 76.1204(a)(1) (1998). The date has been postponed to July 1, 2007. *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices, Second Report and Order*, 20 FCC Rcd 6794, 6810 (2005).

Commission exempted direct broadcast satellite systems from the navigation device integration ban because “the **DBS** equipment market was already subject to the type of competition that Congress and the Commission have sought to **promote**.”¹⁷³

Moreover, Section 629 of the 1996 Act itself points out why the Commission should *not* apply the *Carterfone* principle to the wireless industry. Section 629(e) triggers sunset of rules adopted under the section if the Commission finds that the market for MVP distributors is fully competitive, the market for converter boxes and equipment is fully competitive, and “elimination of the regulations would promote competition and the public interest.”¹⁷⁴

As noted above, the market for wireless services and CPE is competitive, and the Commission has found that *not* regulating bundling in these market, even when there was substantially less competition, promotes competition and the public interest.¹⁷⁵ Therefore, the triggers that required sunset of regulation for cable navigation devices are already in place for the wireless industry. *If the set-top box/Carterfone analogy is applied to the wireless industry, as Skype desires, then the correct result is not to adopt Carterfone regulations.* There is no reason to put in place regulations that even under Section 629 would be deemed obsolete and irrelevant in competitive markets such as exist for wireless services and CPE.

Developments in the technology for MVP distributors also underscore that the Commission should allow the competitive market to control distribution of products and prices in the wireless industry because “excess regulation can discourage innovation and capital

¹⁷³ See *MVP Navigation Device Second Report and Order*, 20 FCC Rcd at 6807.

¹⁷⁴ 47 U.S.C. § 549(e).

¹⁷⁵ See *Cellular CPE Bundling Order*, 7 FCC Rcd at 4030-31.

investment, and thus lock in obsolete technologies.”¹⁷⁶ The pace of development in technology is significantly faster now than it was in the 1960s, at the time of *Carterfone*, and that is reflected the development of MVP equipment. As standards for the 1998 set-top box technology were being developed, new technologies arose for MVP CPE and for the provision of MVP. The consumer electronics industry and cable MVPs developed technology to integrate the channel selection function into the television receivers (“plug-and-play”) and to allow a downloadable software solution for the security/access function. More recently, new technologies for delivery of MVP have entered the market.¹⁷⁷

For precisely the reason that competition and consumer-oriented innovations in technology go hand-in-hand, the Commission has repeatedly found that it should rely on competition in technology rather than mandated standards to bring the benefits of competitive wireless products and services to consumers.¹⁷⁸ Congress also recognized that the goal of promoting a separate market for navigation devices was not to trump the broader objective of encouraging entry and innovation in MVP services.¹⁷⁹ The growth in consumer demand and innovative services, products and technologies demonstrates why not imposing mandated standards on the wireless industry proved extraordinarily beneficial to consumers, and why the

¹⁷⁶ J. Gregory Sidak & Daniel F. Spulber, *Deregulation and Managed Competition in Network Industries*, 15 Yale J. on Reg. 117, 140 (1998).

¹⁷⁷ See *Verizon’s Petition for Waiver of the Set-Top Box Integration Ban*, 47 C.F.R. § 76.1204(a)(1) (filed July 10, 2006) (noting “the standard protocol for separate security that has been developed by the incumbent cable industry would not be adaptable to FiOS TV,” Verizon’s fiber-optic network for delivery of MVP).

¹⁷⁸ See *Eleventh Competition Report*, ¶ 102.

¹⁷⁹ 47 U.S.C. § 549(c) (directing the Commission to grant waivers of the set top box rules if “such waiver is necessary to assist the development or introduction of a new or improved multichannel video programming or other service offered over multichannel video programming systems, technology or products”).

correct choice is not to impose such regulations now.” Neither the *Carterfone* decision nor Section 629 for MVP navigation devices lends itself to repetition for the wireless industry.

G. Skype’s Petition for Declaratory Ruling Is Defective.

Although couched as a request for a declaratory ruling to extend *Carterfone* to the wireless industry, Skype’s Petition is properly treated as a request for rulemaking. Under the Administrative Procedure Act (“APA”), a rulemaking is the appropriate procedural vehicle for the Commission to consider a new future policy.¹⁸¹

First, Skype asks the Commission to issue a declaratory ruling that wireless carriers are subject to the *Carterfone* decision. *Skype Petition*, at 25-28. As Skype notes, *Carterfone* and the earlier *Hush-A-Phone* decisions on which it was based were grounded in declaring that certain AT&T practices were unjust and unreasonable under Sections 201(b) and 202(a) of the Communications Act. But, the Commission has already decided that those sections contain no

¹⁸⁰ Cf., e.g., Thomas W. Hazlett, “Saved from Common Standards,” *Financial Times* (Nov. 27, 2002) (“The FCC had previously set a mandatory analogue standard for cellular phones, for instance. This, one of the great technology mistakes of the twentieth century, was largely repealed in 1988—after major market cellphone systems had been built with antiquated technology.”).

¹⁸¹ See *Community Television of Southern California v. Gottfried*, 459 U.S. 498, 511 (1983); see also *Shell Offshore Inc. v. Babbitt*, 238 F.3d 622, 627-28 (5th Cir. 2001); *Pfaff v. Department of Housing & Urban Development*, 88 F.3d 739, 748 (9th Cir. 1996) (“The disadvantage to adjudicative procedures is the lack of notice they provide to those subject to the agency’s authority. While some measure of retroactivity is inherent in any case-by-case development of the law, and is not inequitable per se, this problem grows more acute the further the new rule deviates from the one before it.”); *Access Charge Reform; Reform of Access Charges Imposed by Competitive Local Exchange Carriers; Petition of Z-Tel Communications, Inc., For Temporary Waiver of Commission Rule 61.26(d) to Facilitate Deployment of Competitive Service in Certain Metropolitan Statistical Areas*, Eighth Report and Order and Fifth Order on Reconsideration, 19 FCC Rcd 9108, ¶ 61, n.2 16 (2004) (noting that “courts have come to favor rulemaking over adjudication in the formulation of new policy” (citing *Bell Telephone Co. v. FCC*, 503 F.2d 1250, 1265 (3rd Cir. 1974), *cert. denied*, 422 U.S. 1026 (1974))).

inherent right to use a carrier's network in publicly beneficial but non-harmful ways, as grant of Skype's declaratory ruling would require, and the Commission's interpretation of the Act was affirmed on appeal.¹⁸² The underlying rationale for *Carterfone* does not support *summary* reversal of the Commission's long-standing policies on technology diversity and unbundling for the wireless industry without a rulemaking.

Second, the relief sought by Skype plainly falls within the purview of a "rule" under the APA.¹⁸³ Skype wants the Commission to adopt a statement of general applicability that would implement future policy – namely a determination that “consumers have the right to attach non-harmful devices to wireless networks” that would apply generally to all wireless carriers. *Skype Petition*, at 27. Likewise, Skype is requesting that the Commission determine that users of wireless broadband Internet access services have the right “to run Internet applications of their choosing,” (*Skype Petition*, 7) which would involve “prescri[bing] for the future” the “facilities, appliances, services, ... [and] practices” of wireless carriers, triggering the requirement for a rulemaking under the APA. In fact, the *Carterfone* decision itself was a tariff investigation, which is a rulemaking of particular applicability under the APA,¹⁸⁴ and the Commission

¹⁸² See *Cellnet Communications v. FCC*, 149 F.3d at 437.

¹⁸³ See 5 U.S.C. § 551(4) (defining "rule" as “the whole or a part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy ... and includes the approval or prescription for the future of ... facilities, appliances, services, or allowances therefor or of valuations, costs, or accounting, or practices bearing on any of the foregoing.” (emphasis added)).

¹⁸⁴ *Beehive Telephone Company, Inc. Beehive Telephone, Inc. Nevada; Tariff F.C.C. No. 1*, Order on Reconsideration, 13 FCC Rcd 11795, ¶ 23 (1998); *Cincinnati Bell Telephone Company Tariff FCC No. 35*, Memorandum Opinion and Order, 8 FCC 4409, n.55.

subsequently extended *Carterfone* by means of a rulemaking when it adopted Part 68 of its rules.¹⁸⁵ Thus, the Commission could not expand *Carterfone* without a rulemaking.¹⁸⁶

Third, Skype's Petition does not seek to "remove uncertainty" within the meaning of the Commission's rules governing declaratory rulings. As noted above, there is no legal uncertainty in the standards to be applied to wireless industry practices, nor is the Commission being asked to interpret an existing rule.¹⁸⁷ Rather, by its own admission, Skype requests a "shift" in policy,¹⁸⁸ which is not surprising given that the *Carterfone* decision, by its plain terms, applied only to AT&T, and the Commission's Part 68 rules apply only to wireline telecommunications providers.¹⁸⁹ Likewise, the Commission has expressly permitted the

¹⁸⁵ *Wireline Competition Bureau Biennial Regulatory Review 2004*, Staff Report, 20 FCC Rcd 263,337 (2005)

¹⁸⁶ *Cf. Pacific Broadcasting & Missouri, LLC; For Special Temporary Authorization to Operate Station KTKY-FM, Refugio, Texas*, Memorandum Opinion and Order, 19 FCC Rcd 10950, ¶ 13 (2004) (deciding to change Commission policy through case-by-case adjudications when the underlying policy had been adopted in adjudicatory proceedings rather than a rulemaking).

¹⁸⁷ Under the Commission's rules, a "declaratory ruling" is a form of adjudication "terminating a controversy or removing uncertainty." 47 C.F.R. § 1.2 (2006); *see Wireless Broadband Internet Access Order*, ¶ 2, n.3 (issuing declaratory ruling in order to "provide regulatory certainty regarding the classification of wireless broadband Internet access service").

¹⁸⁸ *Skype Petition*, at 12; *id* at 5 (urging the Commission to "examine the policies that have guided the [wireless] industry to date and determine if changes are required," which, according to Skype, necessitates that the Commission establish "policy" and "set the basic rules of the road").

¹⁸⁹ *See Carterfone*, 13 FCC 2d at 426 (ordering that particular sections of AT&T's FCC Tariff No. 263 "be stricken and not thereafter be published or given any effect"); 47 C.F.R. Part 68, Subpart A (establishing uniform standards to protect the telephone network from "harms," defined as hazards or damage to the personnel or equipment of "providers of wireline telecommunications"); 47 C.F.R. Part 68, Subpart B (establishing conditions for the connection of terminal equipment to the public switched network, including services "provided over wireline facilities that are owned by providers of wireline telecommunications").

bundling of wireless service and wireless devices,¹⁹⁰ which is the very practice to which Skype strenuously objects and that Skype seeks to change.” Accordingly, the Commission cannot lawfully grant a declaratory ruling as Skype has requested.

¹⁹⁰ *Cellular CPE Bundling Order*, 7 FCC Rcd at 4031 (noting that “significant public interest benefits associated with the bundling of cellular CPE and service”).

¹⁹¹ *Skype Petition*, at 3 (noting that “[i]t has been almost 15 years since the Commission last took a comprehensive look at the wireless industry” in the *Cellular CPE Bundling Order* and claiming that “it is time for another look” given the changes in the interim).

CONCLUSION

Skype's Petition fails to make a case to extend *Curterfone* to wireless services. It ignores technical and regulatory differences in the operation of wireless and wireline networks as well as competitive conditions in the wireline market in 1968 that do not exist in today's wireless world. It brushes past the plethora of innovative devices, applications and services that benefit consumers under the current structure of the wireless sector. Attempting to apply *Curterfone* to wireless would undermine the successful Title III regulatory regime that currently exists, to the clear detriment of consumers. Accordingly, the Skype Petition should be denied.

Respectfully submitted,

VERIZON WIRELESS

By: John T. Scott III
John T. Scott, III
Vice President and Deputy
General Counsel – Regulatory Law

William D. Wallace
Counsel

Verizon Wireless
1300 I Street, N.W.
Suite 400 West
Washington, D.C. 20005
(202) 589-3740

Date: April 30, 2007

CERTIFICATE OF SERVICE

I, William D. Wallace, hereby certify that a copy of the foregoing "Comments of Verizon Wireless," including all exhibits, was served April 30, 2007, by first-class, U.S. mail on:

Henry Goldberg
Devendra T. Kumar
Goldberg, Godles, Wiener & Wright
1229 19th Street, NW
Washington, DC 20036

William D. Wallace